

**COMPREHENSIVE GROUND-WATER MONITORING EVALUATION
CME - 08**

RAYMARK INDUSTRIES

PAD003015328

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RCRAInfo CM&E EVALUATION – VIOLATION FORM

*PA ID Number		PAD003015328		EIN			
Handler Name		Raymark Industries/Phoenix Group Llc.					
Street		123 East Stiegel Street					
City	Manheim	State	PA	Zip Code	17545		
Actual Generator Status <i>Check only if different from Notified Status.</i>		LQG <input type="checkbox"/> SQG <input type="checkbox"/> CESQG <input type="checkbox"/> Closed <input checked="" type="checkbox"/> Non-Handler <input type="checkbox"/>					
Universe Change Required? <i>(Generator Status Change Required)</i>		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> If YES, complete the Universe Change Section (on reverse side of this form).					
RCRA Non-Notifier?		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> If YES, complete the Handler Section (on reverse side of this form).					
Other Facility Information Changes?		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> If YES, complete the Handler Section (on reverse side of this form).					
*EVALUATION		<input checked="" type="checkbox"/> Add <input type="checkbox"/> Update <input type="checkbox"/> Delete		<i>You must provide an Evaluation Identifier (also known as the Sequence Number).</i>			
*Evaluation Identifier	*Type	*Evaluation Start Date (mm/dd/yyyy)	*Agency	Responsible Person	Suborganization		
	CME	6/19/2008	S	TJM	BWM		
Day Zero (mm/dd/yyyy): You need to specify Day Zero for all evaluation types except CDI, CSE, FUI, SNY, and SNN, otherwise it defaults to Evaluation Start Date. For CDI, CSE, FUI, and SNY evaluations, you must select a previous CEI Start Date for the Day Zero. SNN evaluation type does not require a Day Zero.			6/19/2008	Reclassified SV Date: Only applicable for SNY evaluation type as appropriate.			
Notes: <u>No Violations</u>							
Evaluation Indicator Field (Check all that apply)							
<input type="checkbox"/> Citizen Complaint <input type="checkbox"/> Multimedia Inspection <input checked="" type="checkbox"/> Sampling <input type="checkbox"/> Not Subtitle C							
Focused Coverage Areas (Use Only for Evaluation Type FCI)							
<i>Regulation-Specific FCI</i>							
BIF <input type="checkbox"/> CCI <input type="checkbox"/> CFI <input type="checkbox"/> INC <input type="checkbox"/> LDR <input type="checkbox"/> PTB <input type="checkbox"/> PTX <input type="checkbox"/>							
THI <input type="checkbox"/> UIC <input type="checkbox"/> UOI <input type="checkbox"/> UWR <input type="checkbox"/> OTHER (specify): _____							
<i>Routine/Standardized FCI</i>							
CAR <input type="checkbox"/> CPC <input type="checkbox"/> DOS <input type="checkbox"/> EMR <input type="checkbox"/> IEI <input type="checkbox"/> ISI <input type="checkbox"/> RTI <input type="checkbox"/>							
Does this Evaluation Add/Update/Delete a Violation?		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		<i>If Yes, fill in the Violations Section(s) on page 2 of this form.</i>			
Does this Evaluation link to a Commitment?		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		<i>If Yes, please use the RCRAInfo 3007 Information Requests and Commitments Form.</i>			
Does this Evaluation link to a 3007 Request?		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		<i>If Yes, please use the RCRAInfo 3007 Information Requests and Commitments Form.</i>			
OUTSTANDING VIOLATIONS COVERED BY ABOVE EVALUATION?		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		<i>If Yes, fill in information below.</i>			
*Seq. No.	*Violation Type	*Agency	*Regulation Citation (Type + Citation) (ex. FR 262.1)		*Date Determined (mm/dd/yyyy)		

Required Fields

Inspection Id 1734412		Insp Type CME	Comprehensive Monitoring E	Date Inspected 06/19/2008
Inspected Entity	Cat PF	Entity 478179	PAD003015328	MANHEIM AREA ECONOMIC DEV
Type CAHWO	Captive Hazard	Kind	Status INACT	Inactive
More SF	SF 343064	PAD003015328	RAYMARK IND	Type HGCAP
SF Status INACT	Inactive	Documents Launch Inspection Report		

General Insp SF Viol Rel Insp Comp Aest Cover Area Admin P2E2 Summary

Owner/Operator 249565	249565	MANHEIM AREA ECONOMIC DEV CORP
Complaint Id	Inspector 011333	MILLER, THOMAS
Due Date	Inspection Result NOVIO	No Violations Noted
Date Scheduled	Scheduled By	
Agency DEP	PA Dept of Environmental Protect	External Joint Insp
Program WMHW	ICS Code 4300	EP Sc Rgnl Off Harrisbrg

County 36	Lancaster	Municipality 36807	Manheim
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Create ENF Back Go To

TITLE: CME - 08

FACILITY: RAYMARK INDUSTRIES

ID #: PAD003015328

COUNTY: Lancaster

INSPECTOR: Thomas J. Miller, P.G.
PADEP Hydrogeologist

DATE: June 19, 2008

CONTACT: Raymark Industries: Unknown
Current Owner, Phoenix Group: Gary Silversmith,
Future Owner Contact: Lot 5 Associates, (717) 629-1040 Steve Sipe

2.0 INTRODUCTION

The Raymark landfill is a captive facility originally owned and operated by Raymark Industries, Inc. The Upper Mill landfill, the subject of this report had been used by Raymark since the 1940's. It was permitted by the (former) Pennsylvania Department of Environmental Resources (PADER) on July 14, 1977 under Industrial Waste Permit Number 300628. The landfill received off-specification products; binding agent wastes and dust collector fines from grinding and finishing operations. The dust collector fines from bag houses on the facility were classified as hazardous waste. The bag house material was shown to have a lead content in excess of 5.0 mg/l when subjected to the EP Toxicity Leaching Procedure [40 CFR Ch.1, Part 261.24(a)]. Because the dust collector material was mixed with other waste in the landfill, the entire landfill was classified as Hazardous Waste #D008. Asbestos waste in the form of off specification friction products was also disposed in the landfill.

The landfill occupies 10.5 acres of surface area and contains approximately 186,000 cubic yards of waste material. The facility was covered and closed, as approved by the Pa Department of Environmental Protection although not in the manner anticipated by the Resource Conservation and Recovery Act (RCRA). A portion of the landfill had been paved with asphalt and tennis courts built for recreational use by the local community. The last phase of the landfill was closed with an earthen cover and vegetation. The landfill closure was a compromise forced by the financial insolvency of the company and the need for immediate environmental safeguards and public safety.

Raymark had been in and out of Chapter 11 bankruptcy for several years as a result of asbestos lawsuits and declining market share and no longer exists as a manufacturing entity. The manufacturing plant and landfill are located in Manheim Borough, Lancaster Co., PA. Raymark's Manheim facility had been in operation for approximately seventy-five years producing materials for use in clutch, brake and other specialty friction applications. In 1988, a separate company, Raymark Friction took over the industrial processes at the facility. The landfill and other Solid Waste Management Units (SWMUs) on

the property are now the responsibility of the Phoenix Group, LLC and Phoenix Group II, LLC, corporations in the business of developing contaminated properties. The former Raymark site currently has no manufacturing function. The Manheim automobile auction, a re-seller of off lease and used automobiles had used the paved portion of the landfill for storage and staging of automobiles prior to sale. Several of the buildings at the site have been cleaned, rehabilitated and occupied by tenants whose businesses are related to the resale auto industry. The Phoenix Group and the Pennsylvania Department of Environmental Protection signed a Consent Order and Agreement detailing how the property would be remediated under the Commonwealth's Act 2 process. This agreement was signed on January 25, 2001. A Post Closure Care Plan (PCCP) for the hazardous waste landfill, referred to as the Upper Mill Landfill was prepared by RT Environmental (RT) and ultimately approved by the Department. The date on the approved PCCP was December 26, 2000. The Lower Mill Landfill allegedly received no hazardous waste, was closed and is currently monitored under the Commonwealth's Hazardous Sites Cleanup Act (HSCA) regulations. The Post Closure Care Plan was revised May 2, 2008 to reflect a new financial assurance amount for the landfill.

3.0 REGULATORY HISTORY AND CURRENT STATUS

In the late 1970's the DER permitted the Raymark landfill. The landfill had been operating for many years when the Resource Conservation and Recovery Act (RCRA) became effective in Pennsylvania. A RCRA Part A permit involved a demonstration of compliance with reporting, monitoring and operational, as opposed to design requirements. A Part B application was to provide engineering design details showing that the facility met the requirements of RCRA. A Part B application was submitted to the Department on December 8, 1983. The existing landfill did not meet the exclusionary criteria (it is in the floodplain of the Chickies Creek and on carbonate bedrock) or the design requirements in that it was an unlined landfill. A variance request was submitted in January of 1984. These documents claimed that fill onto existing ground provided equivalent environmental protection to that of a double lined landfill. Since the facility had already embarked on a groundwater assessment program due to groundwater degradation, the Department determined that equivalent protection to the groundwater aquifer was not being provided. By letter dated March 1, 1985, DER denied Raymark's Part B application and variance requests. The company was notified that a closure plan for the facility would be required.

A closure plan was submitted to the Department on April 24, 1987. This plan again requested variance from closure requirements for isolation distance to groundwater (even though this is not required by regulation) and capping and cover requirements. A review letter dated September 23, 1987 was mailed to Raymark asking for a satisfactory response to deficiencies of the closure plan as identified in the review letter. The major deficiencies were:

- An asphalt cap was proposed.
- Waste material was below the regional water table.
- Waste was disposed within the 100-year floodplain of Chickies Creek.

A revised Closure Plan was submitted to the Department in May of 1990. This plan proposed the same basic approach as the 1987 plan except that waste was to be removed from the floodway of the creek. Raymark maintained that as a company, they were financially incapable of executing a landfill closure that would meet the requirements of RCRA.

A consent order and adjudication (COA) was negotiated and signed by representatives of Raymark Industries, Raymark Corporation, Raymark Friction, Raytech Corporation and the PADER on March 11, 1991. Closure activities were to be started after approval of the revised (April 1992) 1991 Closure and Post-closure Plan. This approval was granted on 2 Jul 1992.

In 1996, temporary soil cover on the Eastern (non-asphalt) portion of the landfill had begun to erode. Raymark had not made the required permit applications for stream and wetland encroachments. In short, Raymark (various corporate entities) had failed to take any substantive action that would have resulted in completion of the approved closure plan. Management and Mr. David Raphael, Esq. of the Department's Office of Chief Counsel considered enforcement options. It was decided that the Department would issue a *Petition for Enforcement of Administrative Order* to Raymark. This would compel them to defend their lack of action on the agreed upon Closure Plan in Commonwealth Court. Concurrently, Notices of Violation were issued to Raymark for:

- Failure to conduct groundwater monitoring (June 26, 1996).
- Parking vehicles on the surface of the asphalt paved portion of the hazardous waste landfill (July 12, 1996).

No groundwater monitoring had been done in the first half of 1996. The first quarter was missed (according to on-site personnel accounts) due to heavy snow accumulations and the second quarter was intentionally missed in an effort to save money. As a consequence, no split sample results accompanied the 1996 Comprehensive Monitoring Evaluation (CME) report. A third quarter sample was taken by the facility after the Department's Notice of Violation was issued. Department personnel were unavailable to sample on the date that this event took place. Considerable field and legal staff time was expended in enforcement actions at this facility during the fiscal year 1996.

The Department's *petition to enforce* resulted in a Commonwealth Court hearing, held on the 18th of August 1996. The resulting Order of the Court dated the 19th day of August required Raymark to comply with the March 19th 1991 Order and to pay a Civil Penalty to the Department.

RT Environmental Services Inc., of King of Prussia, PA (RT) was retained by Raymark to implement the 1991 Closure Plan. A bar chart copy with planned closure activities was included in Appendix D of the 1996 CME report and will not be duplicated here. Preliminary activities started at the facility in 1996. The Court Order contained stipulated penalties for failure to comply with a schedule of events contained in the Order. Raymark had 6 months (excluding the months of December, January and February) to complete the closure of the landfill. Groundwater monitoring had resumed. The facility was briefly in compliance with the Rules and Regulations of the Department as of the date of the 1996 CME report.

Closure activities did indeed begin in 1996. Waste delineation based on lead and asbestos required the removal of material outside a fence surrounding the landfill. Waste removal and consolidation was completed although questions remained about the location of confirmatory soil samples submitted by RT. Closure activities continued sporadically through 1997 and into 1998. Groundwater monitoring resumed but the activity did not last long. Monitoring was discontinued after the first quarterly sample of 1998.

Later in 1998 Raymark had once again resorted to bankruptcy protection. Letters by the Department's legal counsel were directed to the Chapter 11 Trustee, Laureen M. Ryan who was appointed by order of the U.S. Bankruptcy Court on November 5, 1998. In February 1999, a law firm (Pepe & Hazard) was retained to represent the Trustee for Raymark Industries, Inc. This law firm responded to the Department's request that they complete closure at the landfill and address outstanding Underground Storage Tank (UST) issues at the Manheim facility. A Notice of Violation was sent to the Trustee for the UST irregularities on the Raymark property.

By letter dated June 11, 1999, Gary Brown of RT Environmental, consultant to the site operator requested that the Department release funds held in a Post Closure Care Fund so that closure of the

landfill could proceed. By RT's assessment, closure was approximately 95% complete. They provided an itemized list of outstanding issues and proposed (to Kahn Engineering which had been retained by the Trustee's law firm) an implementation and cost schedule to complete closure. RT (representing Raymark Industries) did not propose nor were they willing to resume groundwater monitoring. By letter dated October 20, 1999, Mr. Siegel, legal counsel for the Department informed the law firm representing the trustee that the Department would embark on closure of the landfill, while reserving the right to seek reimbursement of its expenses relative to the Raymark facility. The letter also requested that Raymark remove the automobiles destined for the Manheim Auto Auction, as they posed an impediment to the Department's action.

As of the beginning of March 2000, Raymark responsible parties had not resumed closure activities. The Department had begun the process of evaluating the site for the remaining closure work to be performed under the Commonwealth's Hazardous Sites Cleanup Program (HSCA). Later in the month Mr. Siegel spoke with Jim Graham, attorney for the Raymark trustee. The Department was informed that the trustee had a potential buyer for the property and that closure and cleanup issues would be addressed quickly.

On March 16, 2000, this author entered discussion with RT representatives on the location for an additional monitoring well, MW-19. This well was necessary due to the semi-radial flow of groundwater from the saturated waste in the landfill. The well was proposed and approved as part of the Closure Plan for the landfill. On March 21, 2000, the well was drilled and constructed. Closure activities had resumed in earnest. In a letter dated March 23, 2000, Robert Benven, Facilities Manager set forth the remaining tasks that were necessary to complete closure of the Raymark Upper Mill Landfill. A groundwater monitoring event took place on March 30, 2000.

RT Environmental Services sent a letter dated March 29, 2000 that addressed the outstanding issues in Mr. Benven's letter. Closure items were being completed through the summer and fall construction season.

On December 13, 2000, the Department sent a detailed letter to RT that provided an explanation of our requirements for groundwater monitoring through the Post-Closure care period. Subsequent discussion resulted in an acceptable monitoring program under the Post Closure Care provisions for the Raymark facility. The approved Post Closure Care Plan (PCCP) dated December 26, 2000 was accepted by the Department and put in effect. A copy of the PCCP that covers groundwater monitoring is attached to this report as an Appendix.

A letter from Department engineer Thomas J. Hanlon, P.E., dated December 20, 2000, concurred with the owner/operator's registered professional engineer who certified that closure of the landfill had been completed in accordance with the approved plans.

The Department accepted the closure of this landfill despite the fact that the final cover did not meet the RCRA requirements for an impervious cap. The final cover is a combination of poorly maintained asphalt and vegetated soil. This was approved because of the need to consolidate and cover the waste and the financial inability of the company to provide a synthetic cover. The lead bearing waste was largely immobile in the alkaline groundwater in which it was disposed. The approved Closure and Post Closure Care Plan anticipated that this cover would be undisturbed except for required maintenance items.

During the June 28th 2005 CME inspection it became obvious that the landfill had not been kept secure. The soil covered portion of the landfill had recently been disturbed by the addition of a large amount of soil fill and waste to the extent that most of the vegetative cover was eliminated and the elevation and grading of that part of the landfill was substantially changed. Photographic evidence of this

activity was contained in the 2005 CME report. This activity can also be seen on the color aerial photograph titled Raymark Industries Upper Mill Landfill included in Appendix D. The fill appears as a triangular brown area immediately to the East of the largest block of cars parked on the asphalt paved portion of the landfill. The Phoenix Group representative on site at the time was Mr. Herman Ramig P.E. Mr. Ramig stated that the soil and waste material was being generated from an adjacent portion of the Upper Mill property where rehabilitation work was taking place. Mr. Ramig further informed the Department that this material was placed on the hazardous waste landfill because the adjacent property was being re-developed under the Department's Act 2 program and that no material was to be taken from the site. This operation was active at the time of the 2005 CME inspection. No one at the Department had been contacted for approval for this disposal and no prior notice had been given by the Phoenix Group. A subsequent site visit by Mr. John Pollock, Solid Waste Specialist with the Department, documented the activity and resulted in written notification to the Phoenix Group of several violations of the Department's Solid and Hazardous Waste Management Regulations. A copy of this August 18, 2005 letter is included in Appendix C of this report.

On October 11, 2005 RT Environmental, consultant to the Phoenix Group responded to the Department that they wanted to resolve the overfill issue by regrading with the illegal fill left in place. The Department responded to this proposal by letter dated June 29, 2006, stating that the proposal was unacceptable and reminding the site owner that their Post Closure Care Plan required quarterly engineering inspections of the closed landfill. After several meetings and much discussion a January 11, 2007 revised grading plan was approved by the Department. A copy of the approval letter is contained in Appendix C. The new plan proposed removal of the unauthorized fill back to approved elevations and a chain link fence with appropriate gating for cap maintenance. The fence would separate the paved portion of the landfill cover from the earthen covered landfill and prevent unauthorized access. The approved plan also reminded the operator once again of their quarterly inspection obligations. Ultimately the overfill was removed, 6000 yds.³ being used on the Lower Mill Landfill and the remainder removed from the property. Regrading to originally approved contours and seeding was finished in late 2007.

Throughout various meetings and site inspections it came to be know that the site owner, Gary Silversmith and Phoenix Group, LLC intended to donate the landfill property, now designated as Lot 4 to the Manheim Area Economic Development Authority. The Authority would in turn, transfer the property to a private owner, Lot 5 Associates. The deal would result in tax benefits for Phoenix, an expanded tax base for the Authority and a parking area for Lot 5 Associates' business of automobile reconditioning. On May 4th 2008, John Oren, Facilities Manager sent a letter to Phoenix LLC discussing the requirement for 30 year post closure bonding and requesting a calculation representing the "worst-case" scenario where the asphalt cap would need to be converted to a soil cap. The amount and the provider of the bond was a point of contention.

Since the original bankruptcy of Raymark Industries, a closure bond has been held by the United States Environmental Protection Agency (USEPA) or the Pennsylvania Department of Environmental Protection (PaDEP). The amount of money representing this collateral bond was \$164,633.13. Much discussion centered on the amount of bonding required to maintain the site for the remainder of the Post Closure Care period. Any new owner of the property will be required to provide proof of financial assurance to the Department, after which the collateral bond could be released to Phoenix, who should then reimburse the owner for the bond they submitted.

On May 12, 2008 the Department received a newly revised Post Closure Care Plan with a revision date of May 2, 2008. Essentially the only difference in this plan and previous revisions is the section titled *PADEP Requirements*, a Plan Sheet titled, "Final Landfill Closure & Access Easement" and Appendix 3 containing Post Closure Cost Calculations & Backup Estimate. By letter dated May 23, 2008, Tom Hanlon, P.E. approved the bond amount and the PCCP.

On June 19, after considerable effort and aggravation, the 2nd calendar quarter groundwater sampling event took place. Analytical Laboratory Services, Inc. (ALSI) was engaged to collect and analyze the groundwater samples, and this author represented the Department in the “split sampling” event. Further discussion follows this section.

4.0 GROUNDWATER SAMPLING NARRATIVE AND DISCUSSION

The sampling and analysis plan for this site was approved with the Post Closure Care Plan but it is brief. It states, in part, “A groundwater sample will be obtained by purging a minimum of three well volumes twenty-four hours prior to sampling a well.” Also, “Specific conductivity, dissolved oxygen, temperature and pH will be measured and purging will be considered complete when two consecutive readings are within 10 percent of each other for each parameter.”

The second quarter of 2008 groundwater sampling event took place on June 19, 2008. Monitoring was contracted to Analytical Laboratory Services, Inc. (ALSI) of Middletown, Pennsylvania. Mr. Forest Olney was the sampler for ALSI. This author represented the Department. Previous sampling events contracted to RT were less than ideal.

Well MW-9 is the background well for this site. The well is located in poorly drained, mosquito infested woodland to the North of the landfill. Revised drainage for the landfill closure resulted in asphalt curbing and a storm water inlet box that obstructed access to the roadway. High clearance vehicles with four wheel drive capability are definitely recommended for sampling this well. The roadway had been recently cleared of ground vegetation, but several fallen trees made the roadway nearly impassable. Downgradient wells are MW-4, MW-6, MW-10A and MW-19.

The reduced list of parameters and number of wells is now in effect at the Raymark landfill. We sampled wells MW-19, MW-9, MW-4, MW-10A and MW-6 in the listed order, for Total and Dissolved Lead, pH, Specific Conductivity, Chloride, Sulfate, Alkalinity and Total Dissolved Solids. Groundwater elevation was determined before and after purging. ALSI purged all wells with a Stainless Steel Grundfos Redi-Flow pump. Samples were taken immediately after the purge was complete. The ALSI sampler calculated and removed three well volumes of water from each well and also tracked field indicator parameters. As there were no volatile or semi-volatile parameters in the list, samples were taken from the discharge line of the pump. The dissolved metal (lead) sample was taken after an inline field filter. Typically I take field measurements for Oxidation/Reduction potential prior to sampling. The Department’s Myron L multimeter was malfunctioning at the time of this sampling event. The results are considered unreliable and will not be presented. The meter has since been replaced.

Dedicated polyethylene discharge tubing was used for each well and the pump was cleaned and decontaminated between wells. The Department’s samples were collected at the same time as those of the contract lab in order to get as representative a “split” as possible. All samples were preserved and iced for transport immediately after they were collected.

The Parameter trend plots (included in Appendix A) illustrate the concentration and relative changes in parameter values over time. In general values had been decreasing with time since the landfill was closed. This indicates that the landfill closure, while not, “state of the art” has been effective in reducing the level of indicator parameters released to the environment. A review of the updated trend plots shows an apparent increasing trend in the concentrations of Alkalinity (wells MW-10A, MW-19), Chloride (wells MW-10A, MW-6), and Sulfate (wells MW-6, MW-10A and MW-19). Lead, the hazardous material for which the site was originally listed, has not been seen in groundwater with any regularity, even when the site was active. Well MW-10A is the exception, however. Since the third

quarter or 2002, total lead has been regularly detected ranging from approximately 25 ug/l to over 500 ug/l. Dissolved lead has also been detected with some regularity in well MW-10A.

If significant amounts of lead were to be leached from the waste, it would not stay in solution long enough to travel far from the site due to the alkaline nature of the groundwater. Most of the lead that was excavated and consolidated back into the landfill during closure was physically eroded by air or water. Groundwater elevation measurements have been relatively normal. Fluctuations of groundwater levels would certainly increase the possibility of moving material from the landfill since the waste is saturated, however this does not explain the persistent lead in well MW-10A. There have been few other changes at the facility to account for increases in contaminant concentrations at this location.

A tabular comparison of laboratory sample results shows little disparity in the analytical reports with the exception of dissolved lead at well MW-10A. The Department's sample result for dissolved lead at MW-10A was Non-Detect at 1 ug/l while that of the consultant was 53 ug/l. The total lead results were comparable at 49.3 ug/l for the Department and 45 ug/l for ALSI. The trend plot for dissolved lead, along with other parameter trend plots is presented in Appendix A. The data for dissolved lead at well MW-10A should be considered suspect. The similarity between results for total (45 ug/l) and dissolved (53 ug/l) lead reported by ALSI leads to the suspicion that a filtered aliquot was not analyzed. For all other analytical parameters the results from ALSI and the Department's analytical laboratory are comparable. Overall the sample results are reasonable and appear accurate.

5.0 RELEASE HISTORY

Over a fifty-year time span, approximately 186,000 cubic yards of waste material, including dust collector fines, a toxicity characteristic waste, were deposited on a 10.5 acre unlined landfill adjacent to Raymark's Upper Mill. Based on the appearance of the surrounding land, this was formerly a poorly drained floodplain of the Chickies Creek or an extension of the existing marsh. A portion of the landfilled waste now exists below the water table.

Dust collector fines were considered a hazardous waste (D008) at this site due to the leachable lead content. After 1987, any dust collector fines produced at Raymark's Manheim plant were trucked off site for disposal. The landfill was officially closed. Manufacturing activity had stopped at the facility and characteristic hazardous waste is no longer produced on site. Most of the industrial land has been sold and redeveloped. Light industry and service industry facilities related to the Manheim auto auction have taken the place of Raymark's manufacturing operations.

Prior sampling at two wells (W-1 and W-13) in the interior of the landfill confirmed the presence of volatile organic chemicals (VOC). In the interior wells; vinyl chloride has exceeded the Pennsylvania Maximum Contaminant Level of 2 micrograms per liter (ug/l) for drinking water. Aniline exceeded the Statewide Health Standard of 2.8 ug/l on one occasion at well W-13, in three sampling events. With the exception of trace amounts of vinyl chloride, VOCs have not reliably been detected in perimeter monitoring wells. The existing Upper Mill landfill, although not closed in a manner that the RCRA envisioned was under control until 2005.

During the site visit on June 28, 2005 this inspector discovered that material was being hauled and placed on the (formerly) soil and vegetation covered portion of the landfill in a generally uncontrolled manner. According to Mr. Herman Ramig P.E., on-site representative of the owner, the Phoenix Group, material generated from an adjacent property was being placed on the RCRA landfill. This was documented in the photographic log for the 2005 CME report and in a subsequent inspection report and correspondence to the Phoenix Group from Mr. John Pollock, Solid Waste Specialist. A copy of this correspondence appears in the Appendix to this report. Mr. Ramig's rationale for this action was that the

remediation of the adjacent property, done under the provisions of the Commonwealth's Act 2 regulations, forbade removal of material from the property. Nowhere did the approved Closure or Post Closure Plan for the Upper Mill Landfill contemplate the placement of additional material beyond that defined in the original approval. After much aggravation the parties responsible for this action removed the unauthorized fill. Lot 5 Associates paid a penalty to the Department for placing the excess soil and waste material on the Upper Mill Landfill. Phoenix Resources LLC paid a penalty for its failure to conduct required quarterly engineering inspections of the landfill closure. The landfill has now been restored to its permitted elevations and contours and vegetation established

6.0 SUMMARY

The Raymark Industries Manheim facility closed its Upper Mill Landfill according to a version of its DER approved (modified 1991) Closure Plan. This closure began in 1996 under order from Commonwealth Court and was completed and documented under the supervision of RT Environmental. The final Department certification inspection took place on December 7, 2000. A letter dated December 20, 2000 verified that the closure had been completed in accordance with the approved Closure Plan.

The approved plan represented a significant compromise with the regulations. It was however, a major improvement over the abandoned condition of the landfill prior to closure. Lead and asbestos were historically the contaminants of concern at the Raymark site due to their presence in the friction materials that Raymark and its subsequent reincarnations manufactured at the site. Lead has been detected occasionally in the groundwater monitoring wells but it has typically been in the form of total lead rather than the more mobile dissolved form. The surface of the landfill was used as an automobile staging area for the Manheim auto auction and consequently subject to heavy vehicle traffic. While not a desirable situation, the asphalt that covered the landfill in this area was repaired and sealed where necessary as part of the closure. An unintended benefit of having millions of dollars worth of automobiles parked on the landfill was that the site was under constant surveillance.

As a consequence of the 2005 CME, a significant compliance issue was identified. The closed landfill was being used as a repository for waste materials and soil fill resulting from redevelopment of the Upper Mill manufacturing complex. Resolving this matter was complicated by the complex nature of the site ownership. Phoenix Resources LLC is the owner of record but the site was supposedly in transition to Manheim Area Economic Development Commission (MAEDC) who intended to transfer the site of the landfill to a company called Lot 5 Associates to use as a parking lot. Finding the proper responsible party proved difficult. Ultimately Phoenix paid a financial penalty to the Department for failure to provide quarterly engineering inspections of the landfill cap, Lot 5 paid a penalty for allowing the fill to be placed and MAEDC paid to have the illegally deposited material removed. Finally, the site has been restored to its permitted closure condition with the addition of a chain link fence separating the paved portion used for parking (see the photo in Appendix C) from the unpaved portion where illegal fill had been dumped.

The transfer of ownership is still pending. The Department approved a new closure bond amount of \$149,674 contingent on the bond being placed in an interest bearing account to make up revenue to cover the cost of converting the asphalt covered portion of the landfill to a soil cover in the event the site is no longer used as a parking lot and the asphalt cannot be maintained. Additionally, the new owner must commit to preparing and signing a new Consent Order/Agreement incurring liability for the site. This will then become the necessary enforceable document to assure future compliance with RCRA.

In Appendix B of this report, site photographs show that there are several well installations that are no longer being properly maintained. These wells, well pairs and piezometer nests were useful during the period of time before and immediately after closure. The installations now represent a liability to the site

operator due to the risk of collision with vehicles and a risk to groundwater if automotive fluids leaked and reached a well with no cap. This condition also presents a vandalism opportunity. Wells MW-19 and well MW-6 have damaged caps that cannot be secured. Several of the wells were not locked. Vegetation in the vicinity of wells MW-6 and MW-10A should be thinned or mowed in order to make sampling more pleasant and eliminate a risk from poison ivy and ticks. In a letter dated August 22, 2008, this author made several recommendations in this regard for the improvement of the landfill cover and sampling integrity at the Upper Mill Landfill. This letter was sent to Lot 5 Associates even though the transfer of the property has not been completed to the date of this writing, and a copy also sent to Phoenix Resources LLC. An additional copy of the letter appears in Appendix C of this report.

According to the monitoring schedule in the approved Post-Closure Care Plan (Revision 7), dated May 2, 2008, groundwater monitoring now shifts to a semi-annual frequency. Future samples will be taken during the 2nd and 4th calendar quarters. As a result of the comprehensive monitoring inspection conducted by this writer on June 19, 2008, the Raymark Upper Mill Landfill is currently in compliance with the RCRA groundwater monitoring requirements.

LOCATION ID	MW-10A	MW-10A	MW-19	MW-19
SAMPLE NUMBER	MW-10A(2Q08)	MW-10A(2Q08)DEP	MW-19(2Q08)	MW-19(2Q08)DEP
SAMPLE DATE	6/19/2008 0:00	6/19/2008 0:00	6/19/2008 0:00	6/19/2008 0:00
PARAMETERS				
ALKALINITY (mg/l)	1280	1293.4	610	615.8
CHLORIDE (mg/l)	58	51	11.8	10.4
LEAD; DISSOLVED (ug/l)	53	1 ND	8 ND	4.1
LEAD; TOTAL (ug/l)	45	49.3	6 ND	5.6
PH-FIELD (SU)	7.14	6.8	6.86	6.9
PH-LAB (SU)		7.2		7
SPEC.COND.,FIELD (umhos/cm)	2335	2290	1368	1350
SPEC. COND.,LAB (umhos/cm)		2370		1393
SULFATE (mg/l)	213	199.7	222	227
TEMP. (deg_ C)		17.6		16.9
TOTAL DISS. SOLIDS (mg/l)	1560	1710	974	936

LOCATION ID	MW-4	MW-4	MW-6	MW-6
SAMPLE NUMBER	MW-4(2Q08)	MW-4(2Q08)DEP	MW-6(2Q08)	MW-6(2Q08)DEP
SAMPLE DATE	6/19/2008 0:00	6/19/2008 0:00	6/19/2008 0:00	6/19/2008 0:00
PARAMETERS				
ALKALINITY (mg/l)	282	280.4	317	315.4
CHLORIDE (mg/l)	36.4	31.7	23.3	21
LEAD; DISSOLVED (ug/l)	8 ND	1 ND	8 ND	1 ND
LEAD; TOTAL (ug/l)	6 ND	1 ND	6 ND	1 ND
PH-FIELD (SU)	7.31	6.9	7.35	6.87
PH-LAB (SU)		7.2		7.2
SPEC.COND.,FIELD (umhos/cm)	781	767.5	1729	1758
SPEC. COND.,LAB (umhos/cm)		788		1775
SULFATE (mg/l)	53.8	50.1	807	822.6
TEMP. (deg_ C)		16.4		15.7
TOTAL DISS. SOLIDS (mg/l)	506	410	1530	1518

LOCATION ID	MW-9	MW-9
SAMPLE NUMBER	MW-9(2Q08)	MW-9(2Q08)DEP
SAMPLE DATE	6/19/2008 0:00	6/19/2008 0:00

PARAMETERS

ALKALINITY (mg/l)	192	190.8
CHLORIDE (mg/l)	33.4	28.8
LEAD; DISSOLVED (ug/l)	8 ND	1 ND
LEAD; TOTAL (ug/l)	6 ND	1 ND
PH-FIELD (SU)	7.61	7.1
PH-LAB (SU)		7.4
SPEC.COND.,FIELD (umhos/cm)	530	540.2
SPEC. COND.,LAB (umhos/cm)		537
SULFATE (mg/l)	42.6	37.7
TEMP. (deg_ C)		14.2
TOTAL DISS. SOLIDS (mg/l)	342	322

RT Environmental Services, Inc.

DEPT OF ENV PROTECTION
Waste Mgmt Program

JUL 17 2008

LETTER OF TRANSMITTAL

TO: Thomas J. Miller, P.G.
PaDEP, Bureau of Land Recycling and Waste Mgmt.
Southcentral Regional Office
909 Elmerton Ave
Harrisburg, PA 17110

909 Elmerton Avenue
Harrisburg, PA 17110-8

Date: July 14, 2008
Job. No.: 2708-71
Subject: Raymark - 2Q 08 gw results

WE ARE SENDING YOU:

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☒ Report

☐ Attached
☐ Prints
☐ Specifications

☐ Under Separate Cover
☐ Plans
☐ Samples
☐ Other: _____

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1	7/11/2008		ALSI - manheim Upper Mill LF - 2nd 08

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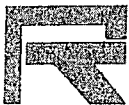
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REMARKS:

By:  Craig Herr



215 West Church Road, King of Prussia, PA 19406 (610)265-1510 Fax:(610)265-0687
E-Mail RTENV@AOL.COM Web Address http:// www.RTENV.COM



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Certificate of Analysis

Project Name:	MANHEIM UPPER MILL LF - 2ND	Workorder:	9741857
Purchase Order:	2708-71-01	Workorder ID:	2nd QM 2008 Manheim Upper Mill

Mr. Craig Herr
RT Environmental
215 West Church Road
King Of Prussia, PA 19406

DEPT OF ENV PROTECTION
Waste Mgmt Program

JUL 17 2008

909 Elmerton Avenue
Harrisburg, PA 17110-8

July 11, 2008

Dear Mr. Herr,

Enclosed are the analytical results for samples received by the laboratory on Thursday, June 19, 2008

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Judy Kester (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticalab.com for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.


Anna G Milliken
Laboratory Manager

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.



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SAMPLE SUMMARY

Workorder: 9741857 2nd QM 2008 Manheim Upper Mill

Discard Date: 07/24/2008

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9741857001	MW-19	Ground Water	6/19/08 10:57	6/19/08 15:12	Forrest Oney
9741857002	MW-9	Ground Water	6/19/08 11:39	6/19/08 15:12	Forrest Oney
9741857003	MW-4	Ground Water	6/19/08 12:38	6/19/08 15:12	Forrest Oney
9741857004	MW-10A	Ground Water	6/19/08 13:12	6/19/08 15:12	Forrest Oney
9741857005	MW-6	Ground Water	6/19/08 14:11	6/19/08 15:12	Forrest Oney

Workorder Comments:

Notes

- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference



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ANALYTICAL RESULTS

Workorder: 9741857 2nd QM 2008 Manheim Upper Mill

Lab ID: 9741857001

Date Collected: 6/19/2008 10:57

Matrix: Ground Water

Sample ID: MW-19

Date Received: 6/19/2008 15:12

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr	RegLmt
WET CHEMISTRY										
Alkalinity, Total	610		mg/L	5	SM20-2320 B		6/20/08 05:44	SAD	A	
Chloride	11.8		mg/L	5.0	EPA 300		6/20/08 13:53	JEP	B	
Sulfate	222		mg/L	5.0	EPA 300		6/20/08 13:53	JEP	B	
Total Dissolved Solids	974		mg/L	5	SM20-2540 C		6/24/08 11:20	LAD	B	
METALS										
Lead, Total	ND		mg/L	0.006	SW846 6010C	6/27/08 MNP	7/2/08 07:31	SRT	C1	
Lead, Dissolved	ND		mg/L	0.008	SW846 6010C	7/1/08 JWK	7/1/08 17:30	JWK	C2	
FIELD PARAMETERS										
Depth to Water Level	9.17		Feet		Field		6/19/08 10:57	FAO	E	
Flow Rate	2.90		gal/min		Field		6/19/08 10:57	FAO	E	
pH, Field (EPA 150.1)	6.86		pH Units		Field		6/19/08 10:57	FAO	E	
Sample Depth	9.18		Feet		Field		6/19/08 10:57	FAO	E	
Specific Conductance, Field	1368		umhos/cm	1	Field		6/19/08 10:57	FAO	E	
Temperature	16.10		Deg. C		Field		6/19/08 10:57	FAO	E	
Time of Sampling	1057				Field		6/19/08 10:57	FAO	E	
Total Well Depth	22.61		Feet		Field		6/19/08 10:57	FAO	E	
Volume in Water Column	8.74		Gallons		Field		6/19/08 10:57	FAO	E	
Well Volumes Purged	3.30		Vol		Field		6/19/08 10:57	FAO	E	

Sample Comments:


Anna G Milliken
Laboratory Manager



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ANALYTICAL RESULTS

Workorder: 9741857 2nd QM 2008 Manheim Upper Mill

Lab ID: 9741857002

Date Collected: 6/19/2008 11:39

Matrix: Ground Water

Sample ID: MW-9

Date Received: 6/19/2008 15:12

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr	RegLmt
WET CHEMISTRY										
Alkalinity, Total	192		mg/L	5	SM20-2320 B		6/20/08 05:51	SAD	A	
Chloride	33.4		mg/L	2.0	EPA 300		6/20/08 16:34	JEP	B	
Sulfate	42.6		mg/L	2.0	EPA 300		6/20/08 16:34	JEP	B	
Total Dissolved Solids	342		mg/L	5	SM20-2540 C		6/24/08 11:20	LAD	B	
METALS										
Lead, Total	ND		mg/L	0.006	SW846 6010C	6/27/08 MNP	7/2/08 07:35	SRT	C1	
Lead, Dissolved	ND		mg/L	0.008	SW846 6010C	7/1/08 JWK	7/1/08 17:49	JWK	C2	
FIELD PARAMETERS										
Depth to Water Level	6.72		Feet		Field		6/19/08 11:39	FAO	E	
Flow Rate	1.76		gal/min		Field		6/19/08 11:39	FAO	E	
pH, Field (EPA 150.1)	7.61		pH_Units		Field		6/19/08 11:39	FAO	E	
Sample Depth	6.75		Feet		Field		6/19/08 11:39	FAO	E	
Specific Conductance, Field	530		umhos/cm	1	Field		6/19/08 11:39	FAO	E	
Temperature	14.10		Deg. C		Field		6/19/08 11:39	FAO	E	
Time of Sampling	1139				Field		6/19/08 11:39	FAO	E	
Total Well Depth	16.70		Feet		Field		6/19/08 11:39	FAO	E	
Volume in Water Column	6.49		Gallons		Field		6/19/08 11:39	FAO	E	
Well Volumes Purged	3.30		Vol		Field		6/19/08 11:39	FAO	E	

Sample Comments:


Anna G Milliken
Laboratory Manager



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ANALYTICAL RESULTS

Workorder: 9741857 2nd QM 2008 Manheim Upper Mill

Lab ID: **9741857003**

Date Collected: 6/19/2008 12:38

Matrix: Ground Water

Sample ID: **MW-4**

Date Received: 6/19/2008 15:12

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr	RegLmt
WET CHEMISTRY										
Alkalinity, Total	282		mg/L	5	SM20-2320 B		6/20/08 05:59	SAD	A	
Chloride	36.4		mg/L	2.0	EPA 300		6/20/08 18:15	JEP	B	
Sulfate	53.8		mg/L	2.0	EPA 300		6/20/08 18:15	JEP	B	
Total Dissolved Solids	506		mg/L	5	SM20-2540 C		6/24/08 11:20	LAD	B	
METALS										
Lead, Total	ND		mg/L	0.006	SW846 6010C	6/27/08 MNP	7/2/08 07:40	SRT	C1	
Lead, Dissolved	ND		mg/L	0.008	SW846 6010C	7/1/08 JWK	7/1/08 17:53	JWK	C2	
FIELD PARAMETERS										
Depth to Water Level	5.30		Feet		Field		6/19/08 12:38	FAO	E	
Flow Rate	4.52		gal/min		Field		6/19/08 12:38	FAO	E	
pH, Field (EPA 150.1)	7.31		pH_Units		Field		6/19/08 12:38	FAO	E	
Sample Depth	5.32		Feet		Field		6/19/08 12:38	FAO	E	
Specific Conductance, Field	781		umhos/cm	1	Field		6/19/08 12:38	FAO	E	
Temperature	13.80		Deg. C		Field		6/19/08 12:38	FAO	E	
Time of Sampling	1238				Field		6/19/08 12:38	FAO	E	
Total Well Depth	43.50		Feet		Field		6/19/08 12:38	FAO	E	
Volume in Water Column	56.15		Gallons		Field		6/19/08 12:38	FAO	E	
Well Volumes Purged	3.10		Vol		Field		6/19/08 12:38	FAO	E	

Sample Comments:


Anna G Milliken
Laboratory Manager



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ANALYTICAL RESULTS

Workorder: 9741857 2nd QM 2008 Manheim Upper Mill

Lab ID: 9741857004

Date Collected: 6/19/2008 13:12

Matrix: Ground Water

Sample ID: MW-10A

Date Received: 6/19/2008 15:12

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr	RegLmt
WET CHEMISTRY										
Alkalinity, Total	1280		mg/L	5	SM20-2320 B		6/21/08 04:45	SAD	A	
Chloride	58.0		mg/L	2.0	EPA 300		6/20/08 18:36	JEP	B	
Sulfate	213		mg/L	5.0	EPA-300		6/21/08 05:40	JEP	B	
Total Dissolved Solids	1560		mg/L	5	SM20-2540 C		6/24/08 11:20	LAD	B	
METALS										
Lead, Total	0.045		mg/L	0.006	SW846 6010C	6/27/08 MNP	7/2/08 07:44	SRT	C1	
Lead, Dissolved	0.053		mg/L	0.008	SW846 6010C	7/1/08 JWK	7/1/08 17:57	JWK	C2	
FIELD PARAMETERS										
Depth to Water Level	7.51		Feet		Field		6/19/08 13:12	FAO	E	
Flow Rate	2.02		gal/min		Field		6/19/08 13:12	FAO	E	
pH, Field (EPA 150.1)	7.14		pH_Units		Field		6/19/08 13:12	FAO	E	
Sample Depth	9.88		Feet		Field		6/19/08 13:12	FAO	E	
Specific Conductance, Field	2335		umhos/cm	1	Field		6/19/08 13:12	FAO	E	
Temperature	16.30		Deg. C		Field		6/19/08 13:12	FAO	E	
Time of Sampling	1312				Field		6/19/08 13:12	FAO	E	
Total Well Depth	15.20		Feet		Field		6/19/08 13:12	FAO	E	
Volume in Water Column	5.00		Gallons		Field		6/19/08 13:12	FAO	E	
Well Volumes Purged	3.20		Vol		Field		6/19/08 13:12	FAO	E	

Sample Comments:

Anna G Milliken
Laboratory Manager



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ANALYTICAL RESULTS

Workorder: 9741857 2nd QM 2008 Manheim Upper Mill

Lab ID: 9741857005

Date Collected: 6/19/2008 14:11

Matrix: Ground Water

Sample ID: MW-6

Date Received: 6/19/2008 15:12

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr	RegLmt
WET CHEMISTRY										
Alkalinity, Total	317		mg/L	5	SM20-2320 B		6/20/08 06:45	SAD	A	
Chloride	23.3		mg/L	10.0	EPA 300		6/20/08 20:27	JEP	B	
Sulfate	807		mg/L	10.0	EPA 300		6/20/08 20:27	JEP	B	
Total Dissolved Solids	1530		mg/L	5	SM20-2540 C		6/24/08 11:20	LAD	B	
METALS										
Lead, Total	ND		mg/L	0.006	SW846 6010C	6/27/08 MNP	7/2/08 07:49	SRT	C1	
Lead, Dissolved	ND		mg/L	0.008	SW846 6010C	7/1/08 JWK	7/1/08 18:00	JWK	C2	
FIELD PARAMETERS										
Depth to Water Level	11.05		Feet		Field		6/19/08 14:11	FAO	E	
Flow Rate	3.33		gal/min		Field		6/19/08 14:11	FAO	E	
pH, Field (EPA 150.1)	7.35		pH_Units		Field		6/19/08 14:11	FAO	E	
Sample Depth	11.51		Feet		Field		6/19/08 14:11	FAO	E	
Specific Conductance, Field	1729		umhos/cm	1	Field		6/19/08 14:11	FAO	E	
Temperature	15.20		Deg. C		Field		6/19/08 14:11	FAO	E	
Time of Sampling	1411				Field		6/19/08 14:11	FAO	E	
Total Well Depth	23.00		Feet		Field		6/19/08 14:11	FAO	E	
Volume in Water Column	17.57		Gallons		Field		6/19/08 14:11	FAO	E	
Well Volumes Purged	3.00		Vol		Field		6/19/08 14:11	FAO	E	

Sample Comments:


Anna G Milliken
Laboratory Manager



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**CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS**

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COC #

ALSI C



* 9 7 6 1 8 5 7 *

101

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Client Name: RT Environmental						Container Type Type — PL PL PL PL								Address: 301 West Church Road King of Prussia, PA 19406								Cooler Temp: 4 Therm ID: 502359							
Contact: Craig Herr x 15						ANALYSES/METHOD REQUESTED								No. of Coolers: Y N Initial															
Phone#: (610) 265-1510														Custody Seals Present? [X] NR															
Project Name/#: Upper Manheim Landfill QIRY (Q: 1,2)														(If present) Seals Intact?															
Bill To: RT Environmental														Received on Ice?															
TAT [X] Normal-Standard TAT is 10-12 business days.														COC Labels Complete/Accurate?															
[] Rush-Subject to ALSI approval and surcharges.														Cont. in Good Cond?															
Date Required: Approved By:														Correct Containers?															
Email? -Y														Correct Sample Volumes?															
Fax? -Y No.:														Correct Preservation?															
														Headspace/Volatiles?															
Sample Description/Location (as it will appear on the lab report)						Sample Date		Time		G or C		Matrix		Field Measurement		Dissolved Pb		Pb		Alkalinity		SO ₄ , TDS, Cl		Courier/Tracking #:					
																								Samples/COC Comments					
1 MW-19						6/16/08		1657		G GW		X		1		1		1		1									
2 MW-9						-		1139																					
3 MW-4						-		1238																					
4 MW-10a						-		1312																					
5 MW-G						-		1411																					
6																													
7																													
8																													
9																													
10																													
Project Comments:						LOGGED BY (signature): [Signature]						DATE: 6/19						TIME: 1725											
						REVIEWED BY (signature): [Signature]						DATE: 7/1/08						TIME: 1104											
Relinquished By / Company Name						Date		Time		Received By / Company Name						Date		Time		Data Deliverables		Special Processing		State Samples Collected In					
1 FORTAID, ALR						6/17/08		1512		2 [Signature] AHS						6/19		1512		[] Standard		USACE		NY					
3										4										[] CLP-like		Navy		NJ					
5										6										[] USACE				PA					
7										8										Reportable to PADEP?		Sample Disposal		NC					
9										10										Yes []		Lab [X]							
																				PWSID #		Special []							
																				EDDS: Format Type-									

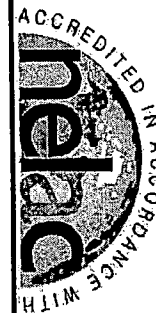
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n, PA 17057 Phone: 717-9





Pennsylvania Department of Environmental Protection

909 Elmerton Avenue
Harrisburg, PA 17110-8200
July 23, 2008

Southcentral Regional Office

717-705-4706
FAX - 717-705-4930

Gary Silversmith
Phoenix Group, LLC
2600 Virginia Avenue, N.W.
Suite 606
Washington, D.C. 20037

Re: Analytical Results
Raymark Hazardous Waste Landfill
Manheim Borough, Lancaster County

Dear Mr. Silversmith:

Pursuant to Section 608(3) of the Solid Waste Management Act (Act 97), the Department of Environmental Protection is furnishing you with copies of the analytical results of samples collected from five monitoring wells at the Upper Mill Landfill on June 19, 2008.

If you have any questions about these results, please call me at 717-705-4912.

Sincerely,

Thomas J. Miller, P.G.
Regional Hydrogeologist
Waste Management Program

Enclosure

cc: Steve Sipe-Lot 5 Associates



bcc: File

T(Raymark_CME08_sample analysis letter.doc)

Date of Issue: 07/13/2008 00:30:02
DEP Bureau Of Laboratories - Harrisburg
P.O. Box 1467
2575 Interstate Drive
Harrisburg , PA 17105-1467

PAGE 1

Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 643 06/19/2008 Status: COMPLETED

Name of Sample Collector: Thomas Miller
Date Sample was Collected: 06/19/2008 11:40:00 AM

County: Lancaster State: PA
Municipality: Manheim Boro

PHOENIX GROUP L.L.C.
123 EAST STIEGEL STREET
MANHEIM PA 17545-

MP ID: MW-9 68683 MP Type: Monitoring Well
MP Location Description: MW-9

Sample Medium: Water
Sample Medium Type: Ground Water

Location: NOT INDICATED
Reason: Routine Sampling
Project: PAD003015328 Raymark Industries Upper Mill Landfill

Background well located in wetland North of the facility.

Appearance: clear

(continued)

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 643 06/19/2008 Status: COMPLETED

Field Tests

Temperature 14.2 C
Specific Conductance 540.2 umhos/c
pH 7.1 pH unit

(Flow Rates) Initial: Final: Units: CFM E/M/C:
Laboratory Sample ID: I2008023139 COMPLETED
Standard Analysis: 200

Test/Codes CAS# - Description	Reported Results	Date Approved
00403 pH	7.4 pH units	06/30/2008
SHUTCHISON EPA 9040??		
** Comment ** Time Limit For Test Exceeded		
01051H LEAD T	<1.0 UG/L	06/20/2008
WIMOWERY EPA 200.8		
01049H LEAD D	<1.0 UG/L	06/20/2008
WIMOWERY EPA 200.8		
00945A SULFATE T	37.7 MG/L	07/01/2008
AMOLNAR EPA 375.2		
00515 TDS @105 C	322. MG/L	07/10/2008
LWILKINSON USGS I-1749		
00403 pH	7.4 pH units	06/30/2008
SHUTCHISON SM 4500H-B		
** Comment ** Time Limit For Test Exceeded		
00095 SPC @ 25.0 C	537.00 umhos/cm	06/23/2008
SHUTCHISON SM 2510B		
00410 ALKALINITY	190.8 MG/L	06/30/2008
SHUTCHISON SM 2320B		

(continued)

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Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 643 06/19/2008

Status: COMPLETED

Test Codes/CAS# - Description	Reported Results	Date Approved
Approver Test Method		

** Comment **	Alkalinity Measured to Endpoint 4.5	
00940A CHLORIDE	28.8 MG/L	07/11/2008
SROSIER EPA 200.7		
** Comment **	Analyzed by Ion Chromatography	

(continued)

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 643 06/19/2008 Status: COMPLETED

The results of the analyses provided in this laboratory report relate only
to the sample(s) identified in the report.

Taru Upadhyay, Technical Director, Bureau of Laboratories

End of Report

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 644 06/19/2008 Status: COMPLETED

Name of Sample Collector: Thomas Miller
Date Sample was Collected: 06/19/2008 12:40:00 PM

County: Lancaster State: PA
Municipality: Manheim Boro

PHOENIX GROUP L.L.C.
123 EAST STIEGEL STREET
MANHEIM PA 17545-

MP ID: MW-4 68680 MP Type: Monitoring Well
MP Location Description: MW-4

Sample Medium: Water
Sample Medium Type: Ground Water

Location: NOT INDICATED
Reason: Routine Sampling
Project: PAD003015328 Raymark Industries Upper Mill Landfill

Well MW-4 immediately north of the landfill. ORP=152mV. Meter
malfunctioning, reading may be suspect.

Appearance: clear

(continued)

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 644 06/19/2008 Status: COMPLETED

Field Tests

Temperature 16.4 C
Specific Conductance 767.5 umhos/c
pH 6.9 pH unit

(Flow Rates) Initial: Final: Units: CFM E/M/C:
Laboratory Sample ID: I2008023140 COMPLETED
Standard Analysis: 200

Test/Codes CAS# - Description	Reported Results	Date Approved
00403 pH	7.2 pH units	06/30/2008
SHUTCHISON EPA 9040??		
** Comment ** Time Limit For Test Exceeded		
01051H LEAD T	<1.0 UG/L	06/20/2008
WIMOWERY EPA 200.8		
01049H LEAD D	<1.0 UG/L	06/20/2008
WIMOWERY EPA 200.8		
00945A SULFATE T	50.1 MG/L	07/01/2008
AMOLNAR EPA 375.2		
00515 TDS @105 C	410. MG/L	07/10/2008
LWILKINSON USGS I-1749		
00403 pH	7.2 pH units	06/30/2008
SHUTCHISON SM 4500H-B		
** Comment ** Time Limit For Test Exceeded		
00095 SPC @ 25.0 C	788.00 umhos/cm	06/23/2008
SHUTCHISON SM 2510B		
00410 ALKALINITY	280.4 MG/L	06/30/2008
SHUTCHISON SM 2320B		

(continued)

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Analytical Report FOR
 Land Recycling & Waste Management

Sample ID: 2310 644 06/19/2008 Status: COMPLETED

Test Codes/CAS# - Description	Reported Results	Date Approved
Approver Test Method		
-----	-----	-----
** Comment ** Alkalinity Measured to Endpoint 4.5		
00940A CHLORIDE	31.7 MG/L	07/11/2008
SROSIER EPA 200.7		
** Comment ** Analyzed by Ion Chromatography		

(continued)

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 644 06/19/2008

Status: COMPLETED

The results of the analyses provided in this laboratory report relate only
to the sample(s) identified in the report.

Taru Upadhyay, Technical Director, Bureau of Laboratories

End of Report

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 645 06/19/2008 Status: COMPLETED

Name of Sample Collector: Thomas Miller
Date Sample was Collected: 06/19/2008 01:15:00 PM

County: Lancaster State: PA
Municipality: Manheim Boro

PHOENIX GROUP L.L.C.
123 EAST STIEGEL STREET
MANHEIM PA 17545-

MP ID: MW-10A 68666 MP Type: Monitoring Well
MP Location Description: Well MW-10A

Sample Medium: Water
Sample Medium Type: Ground Water

Location: NOT INDICATED
Reason: Routine Sampling
Project: PAD003015328 Raymark Industries Upper Mill Landfill

Well in perimeter berm, NW of the landfill. ORP=68mV. Meter
malfunctioning, reading suspect.

Appearance: slightly turbid

(continued) ,

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 645 06/19/2008 Status: COMPLETED

Field Tests

Temperature	17.6	C
Specific Conductance	2290	umhos/c
pH	6.8	pH unit

(Flow Rates) Initial:	Final:	Units: CFM	E/M/C:
Laboratory Sample ID: I2008023141			COMPLETED
Standard Analysis: 200			

Test/Codes CAS# - Description	Reported Results	Date Approved
Approver Test Method		
00403 pH	7.2 pH units	06/30/2008
SHUTCHISON EPA 9040??		
** Comment ** Time Limit For Test Exceeded		
01051H LEAD T	49.300 UG/L	06/20/2008
WIMOWERY EPA 200.8		
01049H LEAD D	<1.0 UG/L	06/20/2008
WIMOWERY EPA 200.8		
00945A SULFATE T	199.7 MG/L	07/01/2008
AMOLNAR EPA 375.2		
00515 TDS @105 C	1710. MG/L	07/10/2008
LWILKINSON USGS I-1749		
00403 pH	7.2 pH units	06/30/2008
SHUTCHISON SM 4500H-B		
** Comment ** Time Limit For Test Exceeded		
00095 SPC @ 25.0 C	2370.00 umhos/cm	06/23/2008
SHUTCHISON SM 2510B		
00410 ALKALINITY	1293.4 MG/L	06/30/2008
SHUTCHISON SM 2320B		

(continued)

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Analytical Report FOR
 Land Recycling & Waste Management

Sample ID: 2310 645 06/19/2008 Status: COMPLETED

Test Codes/CAS# - Description	Reported Results	Date Approved
Approver Test Method		
-----	-----	-----
** Comment ** Alkalinity Measured to Endpoint 4.5		
00940A CHLORIDE	51.0 MG/L	07/11/2008
SROSIER EPA 200.7		
** Comment ** Analyzed by Ion Chromatography		

(continued)

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 645 06/19/2008

Status: COMPLETED

The results of the analyses provided in this laboratory report relate only
to the sample(s) identified in the report.

Taru Upadhyay, Technical Director, Bureau of Laboratories

End of Report

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 646 06/19/2008 Status: COMPLETED

Name of Sample Collector: Thomas Miller
Date Sample was Collected: 06/19/2008 11:00:00 AM

County: Lancaster
Municipality: Manheim Boro

State: PA

PHOENIX GROUP L.L.C.
123 EAST STIEGEL STREET
MANHEIM PA 17545-

MP ID: MW-19 68675
MP Location Description: MW-19

MP Type: Monitoring Well

Sample Medium: Water
Sample Medium Type: Ground Water

Location: NOT INDICATED
Reason: Routine Sampling
Project: PAD003015328 Raymark Industries Upper Mill Landfill

Well to South of earthen capped portion of landfill. Cap broken and
lock compromised. PVC inner casing intact and capped.

Appearance: clear

(continued)

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 646 06/19/2008 Status: COMPLETED

Field Tests

Temperature	16.9	C
Specific Conductance	1350	umhos/c
pH	6.9	pH unit

(Flow Rates) Initial:	Final:	Units: CFM	E/M/C:
Laboratory Sample ID: I2008023142			COMPLETED
Standard Analysis: 200			

Test/Codes CAS# - Description	Reported Results	Date
Approver Test Method		Approved
00403 pH	7.0 pH units	06/30/2008
SHUTCHISON EPA 9040??		
** Comment **	Time Limit For Test Exceeded	
01051H LEAD T	5.600 UG/L	06/20/2008
WIMOWERY EPA 200.8		
01049H LEAD D	4.100 UG/L	06/20/2008
WIMOWERY EPA 200.8		
00945A SULFATE T	227.0 MG/L	07/01/2008
AMOLNAR EPA 375.2		
00515 TDS @105 C	936. MG/L	07/10/2008
LWILKINSON USGS I-1749		
00403 pH	7.0 pH units	06/30/2008
SHUTCHISON SM 4500H-B		
** Comment **	Time Limit For Test Exceeded	
00095 SPC @ 25.0 C	1393.00 umhos/cm	06/23/2008
SHUTCHISON SM 2510B		
00410 ALKALINITY	615.8 MG/L	06/30/2008
SHUTCHISON SM 2320B		

(continued)

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Analytical Report FOR
 Land Recycling & Waste Management

Sample ID: 2310 646 06/19/2008 Status: COMPLETED

Test Codes/CAS# - Description Approver Test Method	Reported Results	Date Approved
** Comment ** Alkalinity Measured to Endpoint 4.5		
00940A CHLORIDE SROSIER EPA 200.7	10.4 MG/L	07/11/2008
** Comment ** Analyzed by Ion Chromatography		

(continued)

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 646 06/19/2008

Status: COMPLETED

The results of the analyses provided in this laboratory report relate only
to the sample(s) identified in the report.

Taru Upadhyay, Technical Director, Bureau of Laboratories

End of Report

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 647 06/19/2008 Status: COMPLETED

Name of Sample Collector: Thomas Miller
Date Sample was Collected: 06/19/2008 02:15:00 PM

County: Lancaster State: PA
Municipality: Manheim Boro

PHOENIX GROUP L.L.C.
123 EAST STIEGEL STREET
MANHEIM PA 17545-

MP ID: MW-6 68681 MP Type: Monitoring Well
MP Location Description: MW-6

Sample Medium: Water
Sample Medium Type: Ground Water

Location: NOT INDICATED
Reason: Routine Sampling
Project: PAD003015328 Raymark Industries Upper Mill Landfill

Well outside fence to the West of the paved portion of the facility.
Cap broken and well unlocked. Prolific poison ivy surrounding well.
ORP=155mV. Meter malfunctioning so reading may be unreliable.

(continued)

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 647 06/19/2008 Status: COMPLETED

Appearance: slightly turbid

Field Tests

Temperature	15.7	C
Specific Conductance	1758	umhos/c
pH	6.87	pH unit

(Flow Rates) Initial:	Final:	Units: CFM	E/M/C:
Laboratory Sample ID: I2008023143			COMPLETED
Standard Analysis: 200			

Test/Codes CAS# - Description	Reported Results	Date Approved
00403 pH	7.2 pH units	06/30/2008
SHUTCHISON EPA 9040??		
** Comment ** Time Limit For Test Exceeded		
01051H LEAD T	<1.0 UG/L	06/20/2008
WIMOWERY EPA 200.8		
01049H LEAD D	<1.0 UG/L	06/20/2008
WIMOWERY EPA 200.8		
00945A SULFATE T	822.6 MG/L	07/07/2008
AMOLNAR EPA 375.2		
00515 TDS @105 C	1518. MG/L	07/10/2008
LWILKINSON USGS I-1749		
00403 pH	7.2 pH units	06/30/2008
SHUTCHISON SM 4500H-B		
** Comment ** Time Limit For Test Exceeded		
00095 SPC @ 25.0 C	1775.00 umhos/cm	06/23/2008
SHUTCHISON SM 2510B		

(continued)

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Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 647 06/19/2008

Status: COMPLETED

Test Codes/CAS# - Description	Reported Results	Date Approved
Approver Test Method		
00410 ALKALINITY	315.4 MG/L	06/30/2008
SHUTCHISON SM 2320B		
** Comment **	Alkalinity Measured to Endpoint 4.5	
00940A CHLORIDE	21.0 MG/L	07/11/2008
SROSIER EPA 200.7		
** Comment **	Analyzed by Ion Chromatography	

(continued)

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Contact Phone Number: (717) 346-7200

Analytical Report FOR
Land Recycling & Waste Management

Sample ID: 2310 647 06/19/2008

Status: COMPLETED

The results of the analyses provided in this laboratory report relate only
to the sample(s) identified in the report.

Taru Upadhyay, Technical Director, Bureau of Laboratories

End of Report

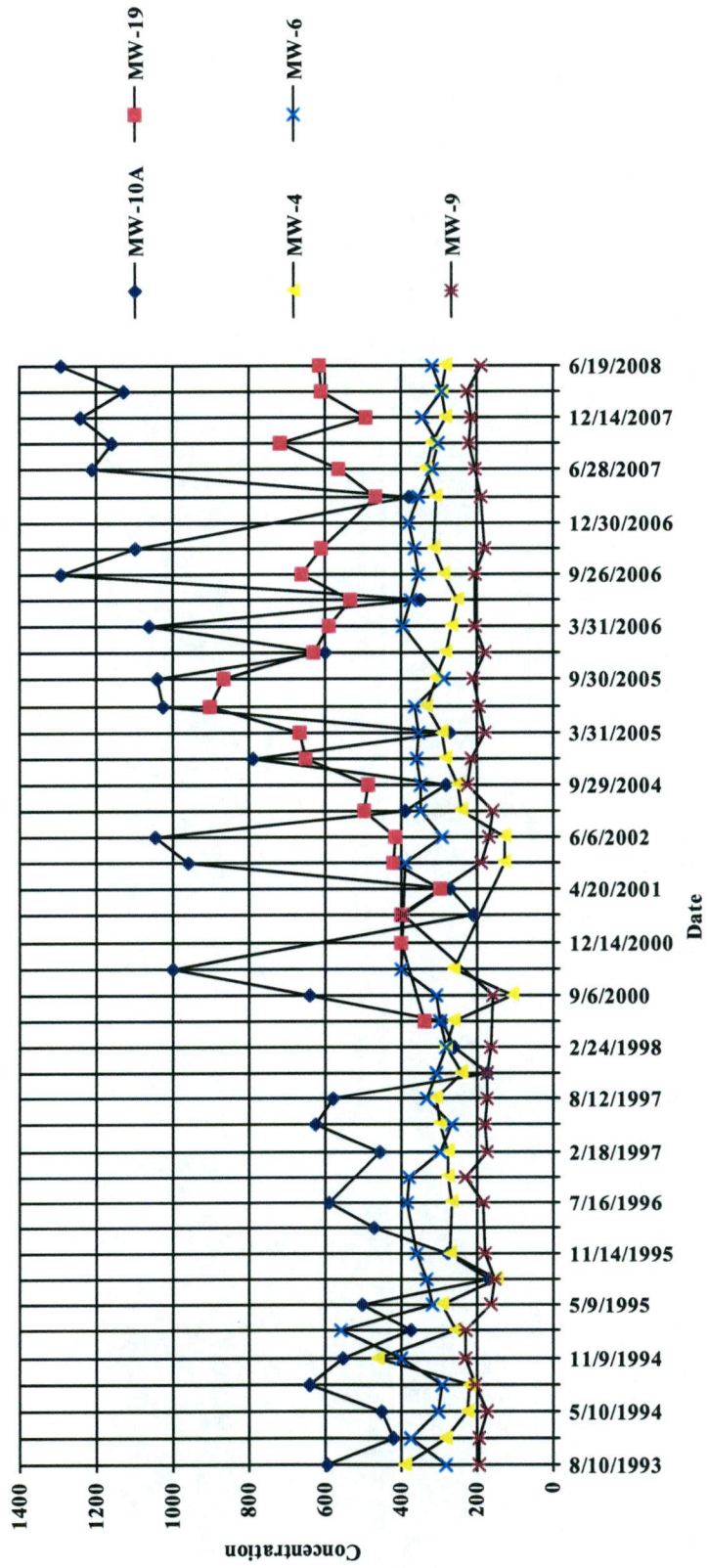
7/28/2008
2:16:08 PM

Pennsylvania Department of Environmental Protection

Raymark

Trend Plot For: ALKALINITY (mg/l)

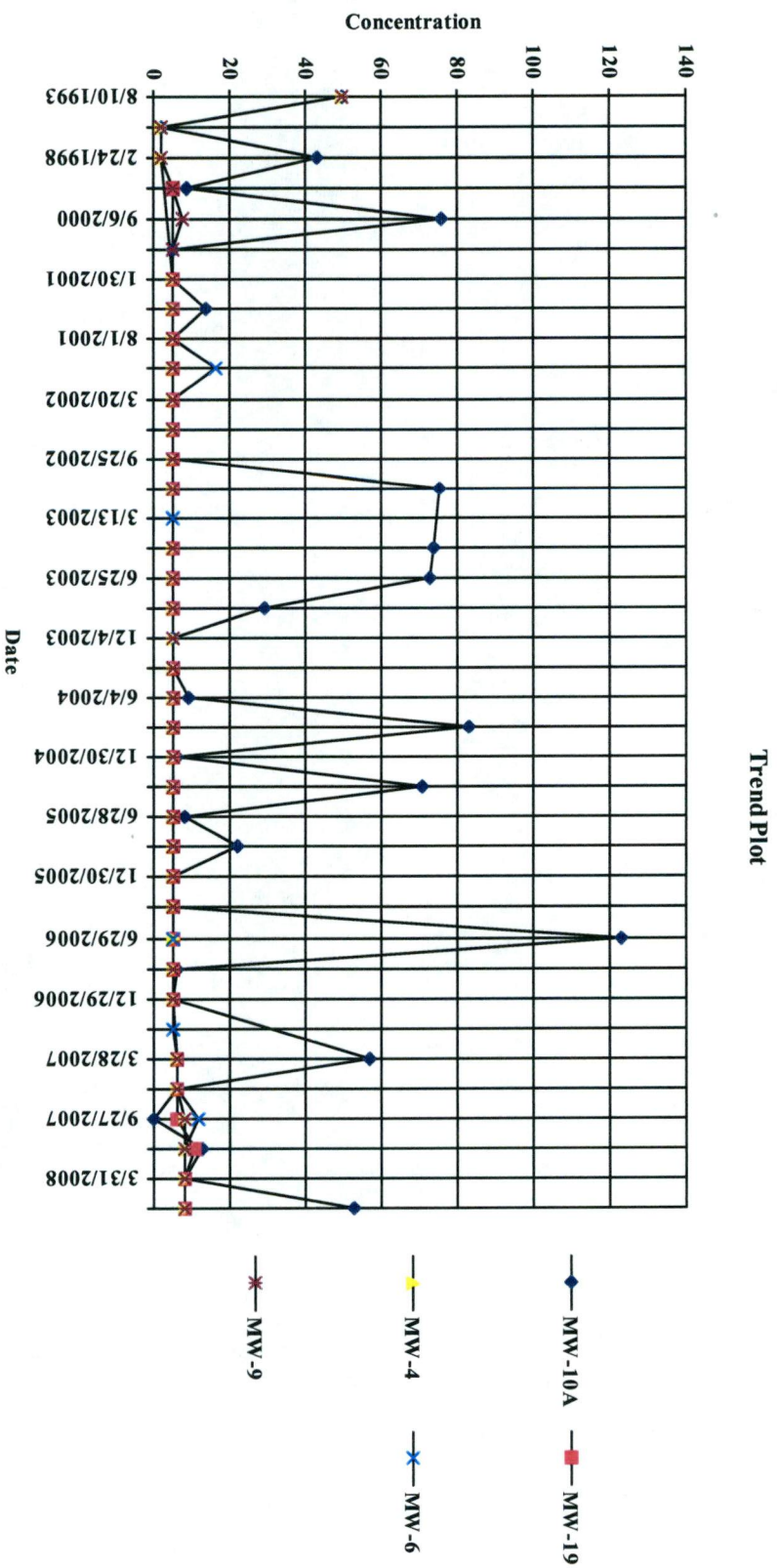
Trend Plot



Pennsylvania Department of Environmental Protection
Raymark

7/28/2008
2:28:01 PM

Trend Plot For: LEAD; DISSOLVED (ug/l)



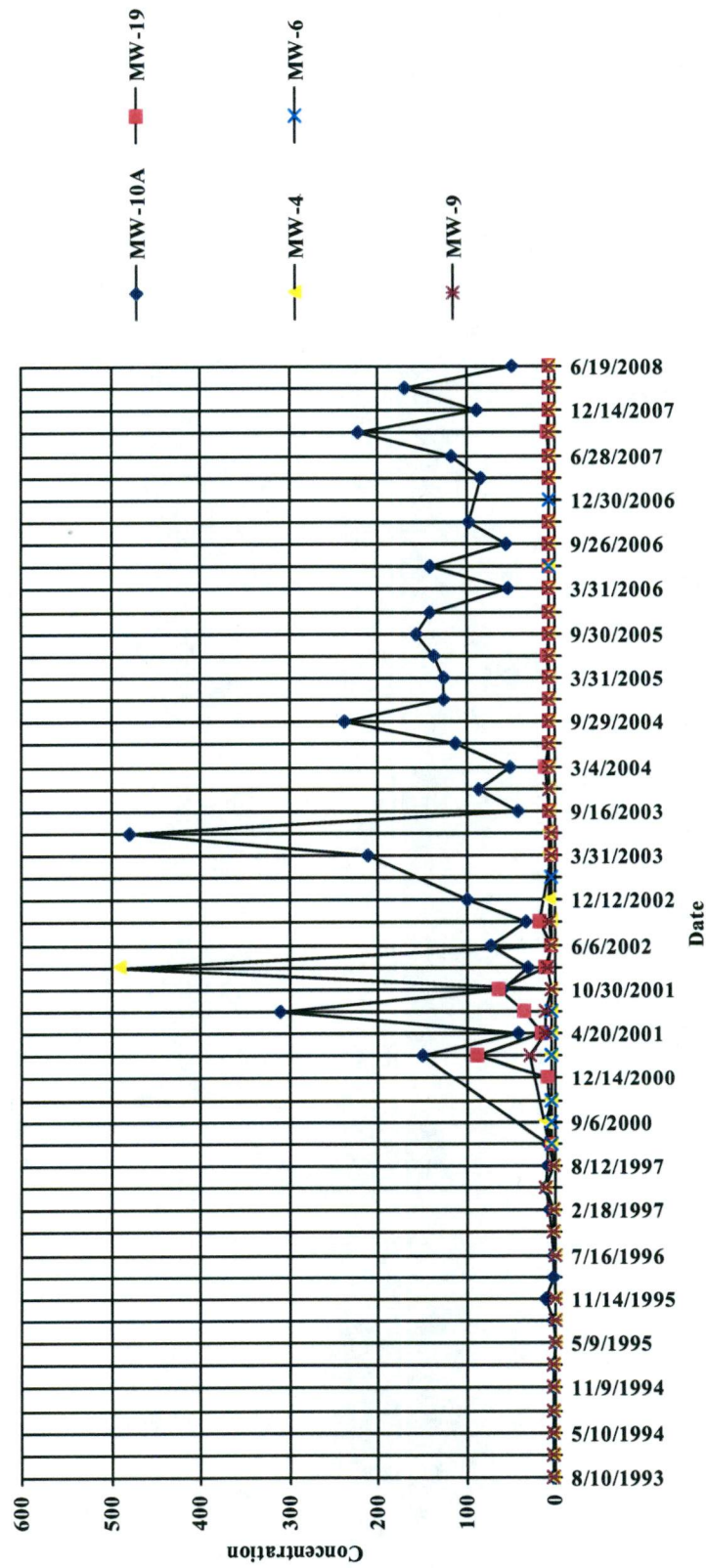
7/28/2008
2:20:32 PM

Pennsylvania Department of Environmental Protection

Raymark

Trend Plot For: LEAD; TOTAL (ug/l)

Trend Plot



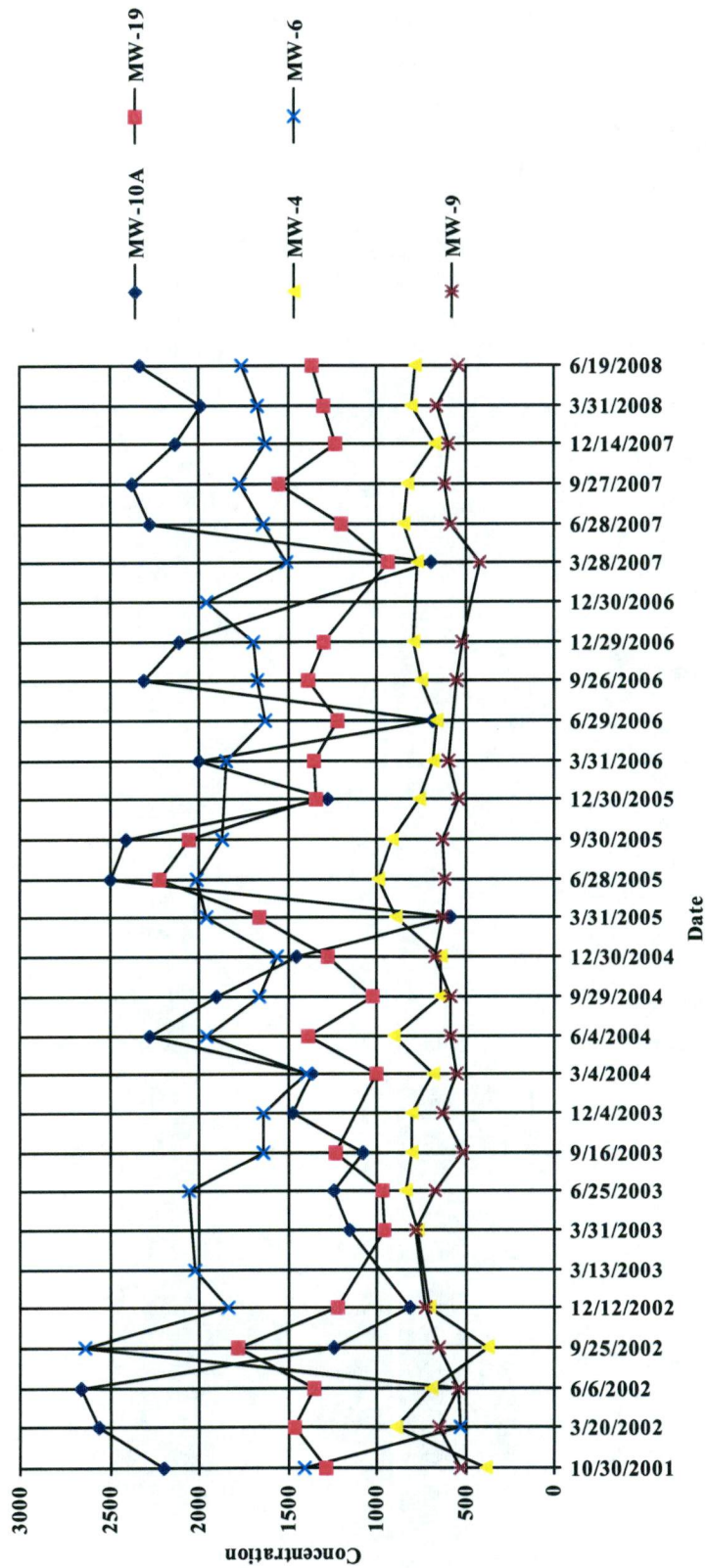
7/28/2008
2:30:13 PM

Pennsylvania Department of Environmental Protection

Raymark

Trend Plot For: SPECIFIC CONDUCTANCE, FIELD (umhos/cm)

Trend Plot



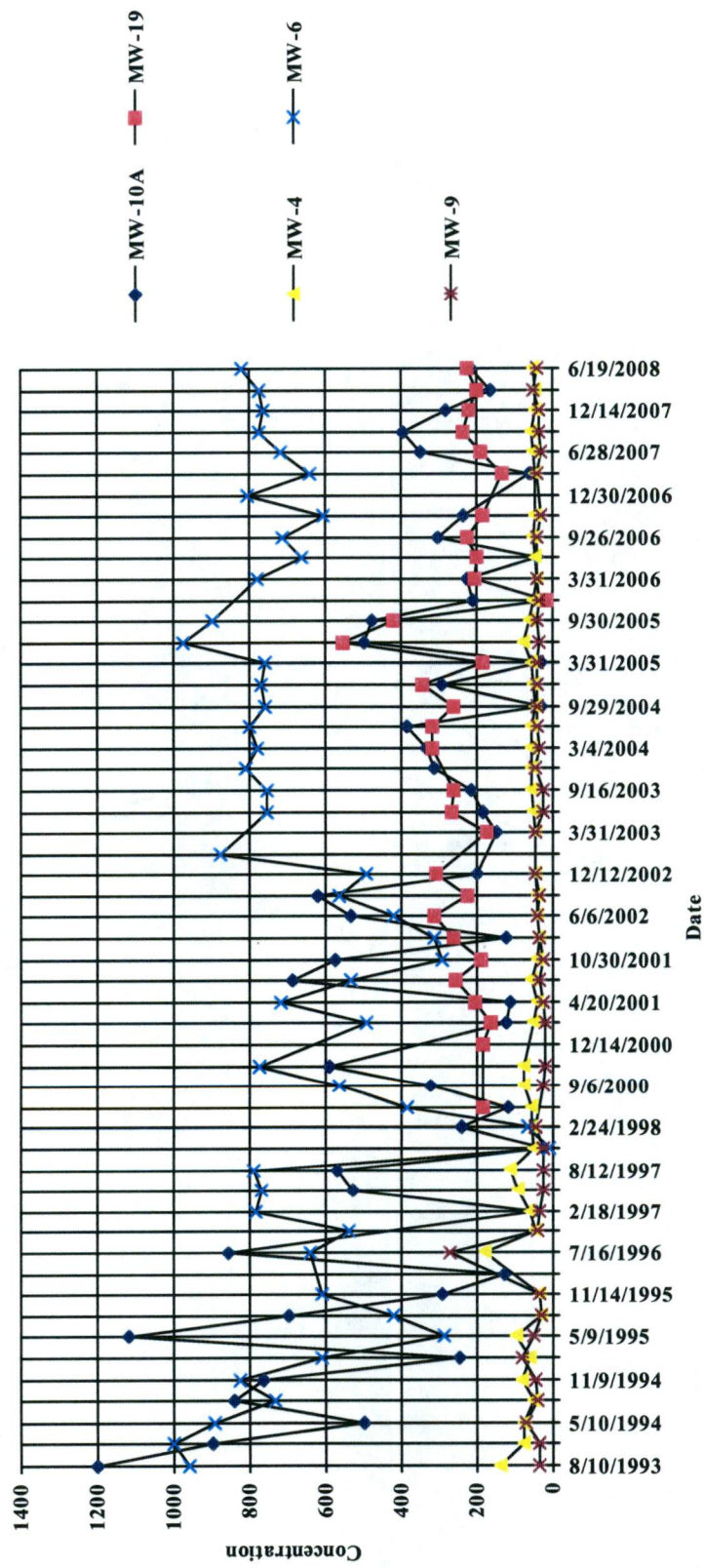
7/28/2008
2:31:38 PM

Pennsylvania Department of Environmental Protection

Raymark

Trend Plot For: SULFATE (mg/l)

TrendPlot

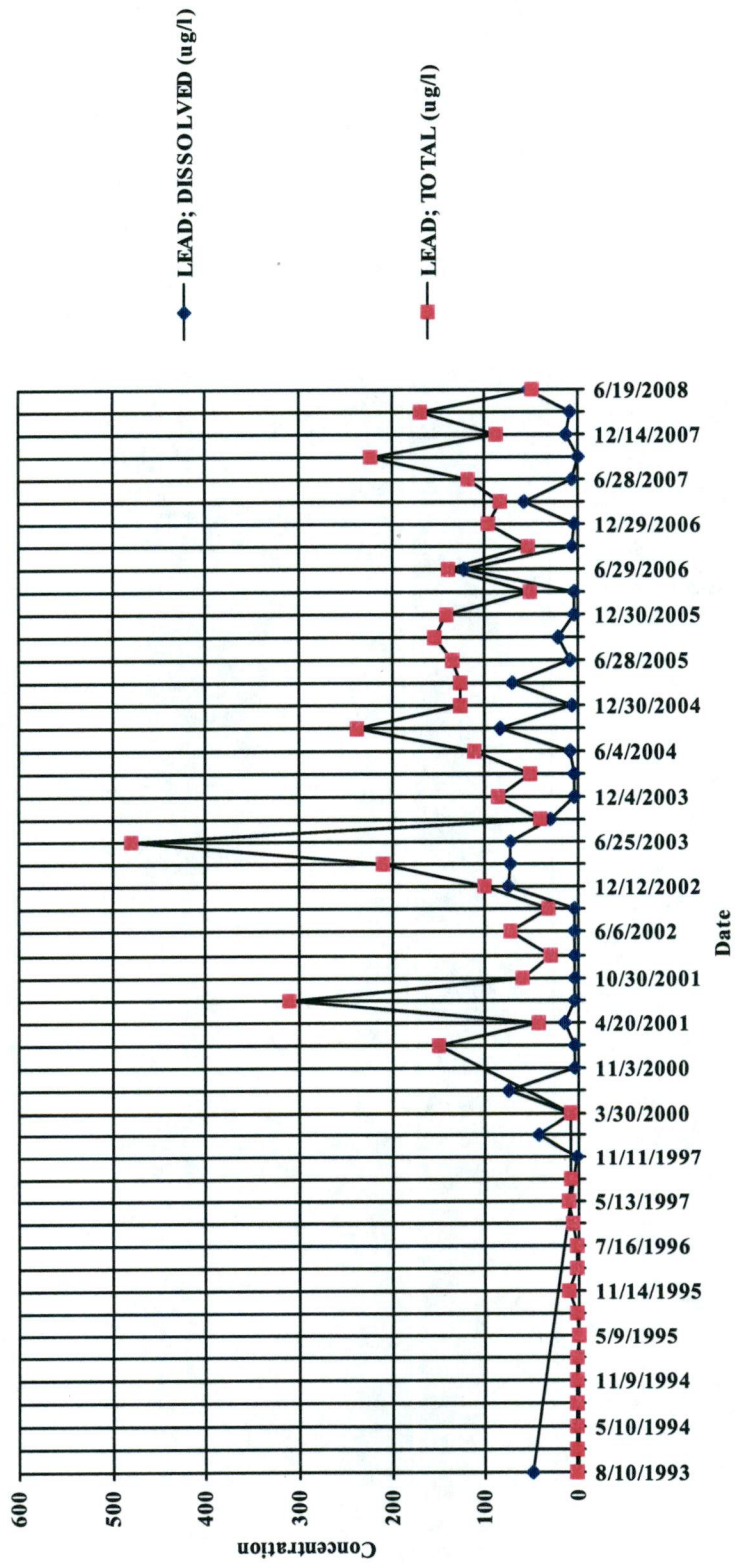


Pennsylvania Department of Environmental Protection

Raymark

Location: MW-10A

Trend Plot



APPENDIX B
SITE PHOTOGRAPHS



06/19/08 New Fence-View South.



06/19/2008 New Fence-View SW.



06/19/2008 Unused well cluster.



06/19/2008 Broken well on paved landfill surface.



06/19/2008 Purging MW-9, upgradient well.



06/19/2008 Well MW-19, cap broken



06/19/2008 Analytical lab sampler at MW-4



06/19/2008 Well-10A, purging underway.



06/19/2008 Location of MW-6 in thicket of trees.



06/19/2008 MW-6 in poison ivy, cap broken.

APPENDIX C.
ENFORCEMENT DOCUMENTS



Pennsylvania Department of Environmental Protection

909 Elmerton Avenue
Harrisburg, PA 17110-8200
August 22, 2008

Southcentral Regional Office

717-705-4706
FAX - 717-705-4930

Mr. Steve Sipe
Lot 5 Associates
144 East Stiegel Street
Manheim, PA 17545

Re: Raymark Upper Mill Landfill (Lot 4)
PAD 003015328
Groundwater Monitoring Inspection

Dear Mr. Sipe:

During a groundwater monitoring inspection at the subject facility on June 19, 2008, I had an opportunity to walk the surface of both the asphalt and soil capped portions of the landfill. The recently restored soil capped portion of the landfill looked good with adequate vegetative cover and reasonably stable slopes. The asphalt covered landfill showed signs of recent repair and sealing. The new chain link security fence between the two sites is a welcome addition to the landfill and should help prevent future unauthorized access to the site.

There are areas, however, where the site could be measurably improved. There are many unused well clusters and single well installations through the landfill surface. These wells no longer serve a useful purpose and represent a threat to vehicles traveling across the site and a potential for groundwater contamination. The wells are poorly maintained and some wells are not secure. A well inventory of the property should be made to identify and locate all groundwater monitoring wells. Wells that are no longer useful should be properly abandoned.

Wells MW-19 and MW-6 are two of the monitoring points that require sampling during the Post Closure Care period of the landfill. The caps and locks are broken on both of these wells leaving them vulnerable to vandalism and contamination. New caps with appropriate locking hasps should be installed and these wells along with all other wells that are not abandoned should be locked.

Access to some of the monitoring points is difficult. Well MW-9 is located in the wooded area north of the landfill. Trees have fallen across the road in several places. These trees should be removed. Thick vegetation surrounds Wells MW-10A and MW-6. Periodic mowing or thinning of the vegetation should be done prior to sampling events. Obviously, no herbicides or chemical sprays should be used anywhere near the monitoring wells.

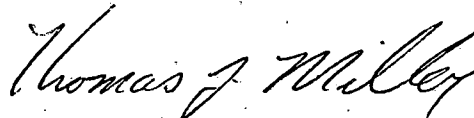
The sampling work done by Analytical Laboratory Services Inc. is very good. During the second quarter event, however, the sampler did not have the proper equipment to field filter the groundwater for dissolved metals analysis. Filtration for dissolved metals should be done at the wellhead as soon as the groundwater sample is taken. This is industry standard practice and is written in the Post Closure Care Plan for the facility.

The following are my recommendations:

- Locate and identify wells drilled at the landfill. Wells that are no longer useful should be properly abandoned by a professional well driller. Please consult with the Department before removing wells to make sure that they are no longer required. A well abandonment report must be filed with the Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey at the completion of this work. I can provide guidance if your driller is unfamiliar with this requirement.
- Repair the caps and locking mechanism for all wells that are not abandoned. Monitoring wells should be securely locked at all times except during sampling.
- Remove unwanted vegetation and dead fall trees that make access to the monitoring wells difficult.
- Make certain that your groundwater sampling consultant follows the appropriate sampling protocol when taking samples for analysis.

Thank you for your attention to this matter. I have enclosed some photographs from the date of the inspection for reference. If you have any questions on this letter or its implications to the site, please contact me at the letterhead address or by electronic mail at: thomiller@state.pa.us.

Sincerely,



Thomas J. Miller, P.G.
Regional Hydrogeologist
Waste Management Program

Enclosure

cc: Gary Silversmith, Phoenix Resources, LLC



Pennsylvania Department of Environmental Protection

909 Elmerton Avenue
Harrisburg, PA 17110-8200
January 31, 2007

Southcentral Regional Office

717-705-4706
FAX - 717-705-4930

Gary R. Brown, P.E.
RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

Re: Former Raymark Facility
Upper Mill Landfill
Manheim Borough, Lancaster County

Dear Mr. Brown:

We have reviewed your January 11, 2007 submission related to the Upper Mill Landfill closure plan at the former Raymark Facility in Manheim, Lancaster County.

The proposal as submitted is approved as detailed below:

- As we discussed on January 29, test pits will be installed, and the "new fill" removed back to the original cap in all areas of the Upper Mill Landfill, with test pits being more concentrated along the outer slope of the landfill area.
- The fence proposed to separate the paved portion of the landfill from the unpaved portion will tie in with existing fences where applicable to provide security for the entire unpaved landfill.
- Adequate gating will be provided with the fence to allow the access of equipment to perform cap maintenance work.

In addition to these points, proper erosion and sedimentation controls shall be installed and properly maintained during the project.

Also, we would like to remind the owners of the Upper Mill Landfill property of the requirement in the approved post closure care plan to conduct a quarterly engineering inspection of the paved and unpaved portions of the landfill to ensure cap integrity. The results of these inspections are to be included in the required groundwater monitoring submissions to the Department.

If you have any questions, please call me at 717-705-4925

Sincerely,

Thomas J. Hanlon, P.E.
Sanitary Engineer III
Waste Management Program

cc: Gary Silversmith, Phoenix Group, LLC



bcc: Linda Houseal

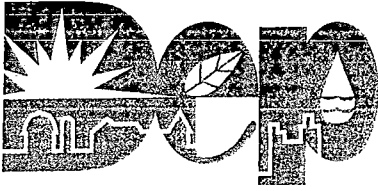
Tom Miller

John Pollock, Lancaster D.O.

Kathy Horvath, ECP

File

T



Pennsylvania Department of Environmental Protection

909 Elmerton Avenue
Harrisburg, PA 17110-8200
May 23, 2008

Southcentral Regional Office

717-705-4706
FAX - 717-705-4930

Gary R. Brown, P.E.
RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

Re: Former Raymark Facility
Upper Mill Landfill
PAD003015328
Manheim Borough, Lancaster County

Dear Mr. Brown:

We have reviewed the Revision 7 - May 2, 2008 version of the Raymark Industries Landfill Post-Closure Care Plan submitted on behalf of the Phoenix Group.

The information is acceptable and we hereby approve the plan. As part of the approval, we are also approving the revised post-closure cost estimate of \$149,674.

The revised post closure cost estimate is approved based on the assumption that the post closure funds will be placed into an account bearing at least 3.7 percent interest. If the post closure care funds are not placed in such an account, the owners of the former Raymark Landfill will be required to submit a revised post closure cost estimate.

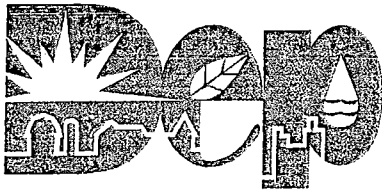
If you have any questions, please call me at 717-705-4925.

Sincerely,

Thomas J. Hanlon, P.E.
Environmental Engineer
Waste Management Program

cc: Gary Silversmith, Phoenix Group
Robert Stoner, MAEDC
Steve Sipe, Manheim Automotive Parking, LLC
Michael Davis, Esq., Barley, Snyder, Senft and Cohen, LLP





Pennsylvania Department of Environmental Protection

909 Elmerton Avenue
Harrisburg, PA 17110-8200
February 4, 2008

Southcentral Regional Office

717-705-4706
FAX - 717-705-4930

Gary R. Brown, P.E.
RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

Re: Former Raymark Industries
Upper Mill Landfill
Manheim Borough, Lancaster County

Dear Mr. Brown:

The purpose of this letter is to provide comments on the bond amount needed to cover the costs associated with the post closure monitoring and maintenance of the former Raymark Corporation landfill located in Manheim Borough, Lancaster County.

As stated in Chapter 265a.160 of the Department's hazardous waste regulations, the bond amount is determined based upon the total estimated cost to the Commonwealth to complete final closure of the facility. Based on recent experience with forfeiting bonds at sites, and additional guidance from EPA and the Department, we have become more aware of the actual costs to the Commonwealth to perform closure activities at facilities and we use this information in evaluating closure/post closure cost estimates.

With that, we have reviewed your recent post closure cost estimates (current version revised January 2, 2008), and while we agree with the cost estimates and timeframe for post closure ground water monitoring at the site, we believe two issues need to be further evaluated and included in a revised estimate. The two items, which are further discussed below, are the need for 30-year cost estimates for maintenance activities and the need to establish costs for either totally replacing the existing asphalt cap or removing the cap and installing a soil cover cap.

1. The requirement for 30-year post closure maintenance:

40 CFR 265.117 states that post closure care for each hazardous waste management unit shall begin at the completion of closure and continue for 30 years after that date. Maintenance of waste containments systems is listed as a requirement during post closure care. Raymark became subject to the requirements for closure and post closure care by filing for interim status for the landfill. The Department denied the facility's Part B application in 1986, and the facility was required to close the landfill. Closure certification of the landfill was accepted by the Department on December 20, 2000.

We cannot find any correspondence addressing our August 4, 2000 letter which stated that post closure cost estimates for maintenance activities should be calculated for thirty years, not twenty. We do recognize that the post closure plan approved December 26, 2000 and revisions included a cost estimate associated with twenty years of maintenance activities, but the regulation as cited does require that maintenance activities be conducted for thirty years. The cost estimate should be revised to reflect this.

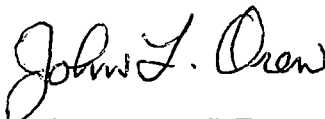
2. *Replacing the existing asphalt cap with new asphalt or soil:*

Guidance on calculating closure/post closure costs provided by the U.S. EPA and the Department state that costs should be based on a likely "worst case" scenario. Since this facility has been closed with an asphalt cap over a portion of the landfill, a likely worst case scenario is that the cap will have to be replaced. In your letter of January 16, 2008, you suggest that if the facility is not used for a parking area, then the facility should be required to obtain Department approval to convert the asphalt cap to a non-pavement cap. This suggestion supports the Department's position that replacement of the cap be accounted for in the cost estimate. Please modify the current cost estimate to include costs for removing and replacing the existing cap.

The Department appreciates the efforts of the parties involved in the post closure care at the site and we will work with all parties to finalize the property transfer. We once again remind everyone that the facility is a closed hazardous waste landfill and protection of human health and the environment through compliance with approved plans and the rules and regulations of the Department should be the foremost priority for all involved.

If you have any questions, please contact me at 717-705-4907.

Sincerely,



John L. Oren, P.E.
Permitting Section Chief
Waste Management Program

cc: Gary Silversmith, Phoenix Group, LLC
Rob Stoner, Manheim Borough
Steven Sipe, Lot 5 Associates, LLC
Herm Ramig
Michael Davis, Esq.
Linda Matyskeila, U.S. - EPA Region III



Pennsylvania Department of Environmental Protection
1661 Old Philadelphia Pike
Lancaster, PA 17602
August 18, 2005

Lancaster District Office

717-299-7601
FAX: 717-396-7178

Phoenix Group
Attention: Herman Ramig
123 East Stiegel Street
Manheim, PA 17545

Re: Hazardous Waste Inspection
Phoenix Group
PAD 003015328
Manheim Borough, Lancaster County

Dear Mr. Ramig:

As a result of a July 25, 2005 inspection at the referenced facility, the Department of Environmental Protection (Department) noted several concerns at the facility.

Our first concern relates to the waste/soil placed adjacent to and over the side slopes of the landfill, which was generated from an excavation of another lot. In accordance with 40 CFR 264.117(d) and 264.118(d), "...all post-closure care activities must be in accordance with the provisions of the approved post-closure plan as specified in 264.118" and "The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved post-closure plan in accordance with the applicable requirements in parts 124 and 270. The written notification or request must include a copy of the amended post-closure plan for review and approval by the regional administrator..." Phoenix did not first submit a request to the Department for a modification to the post-closure plan (approved on July 2, 1992) before soil/waste was hauled in and deposited on the side slope of the closed hazardous waste landfill. Therefore, this constitutes a violation of the Hazardous Waste Management Regulations referenced above. Also this is a violation of the Solid Waste Management Act (SWMA) Sections 6018.610 (1),(2),(4),(8)(i) and (9).

In order to correct the violation referenced above, it is recommended that Phoenix group:

1. Immediately cease placement of any additional soil material onto the landfill/adjacent to the landfill.
2. Install silt fence/other erosion control measures to prevent erosion and sedimentation from the exposed soil.
3. Submit a sampling and analysis plan and time schedule for sampling the soils that have already been placed on the SE side slope of the landfill for review and approval by the Department by September 15, 2005.

Phoenix Group
Attention: Herman Ramig

-2-

August 18, 2005

4. Either remove the soils placed to date and restore the side slopes to the original configuration and design of the approved closure plan or submit a request for a modification to the landfill closure plan (i.e. the change of grades and depth of soil cover in the subject area) by September 30, 2005.
5. If submission of a request for a change to the approved closure plan is preferred, it is recommended that the following information, at a minimum, be provided to the Department.
 - a. Any changes in grades, elevations of the final topographic map for the landfill.
 - b. Cross-sections through the affected area which show the elevations of the waste, the previously approved contours and the proposed contours and any changes to the capping material.
 - c. Verification that the soils meet the criteria for final cover.

In addition, waste material was placed on the hazardous waste landfill (from the lot now owned by KAPS Recon). The Department recommends the following:

1. Cease placement of any additional waste materials on the hazardous waste landfill.
2. Containerize and properly characterize the waste which is now stockpiled on the landfill's eastern edge, by September 15, 2005. Copies of analytical results should be forwarded to the Department as soon as they are received.
3. Properly dispose of the waste materials at a permitted facility by September 30, 2005.
4. Provide notification to the lot owner, from which the material came (KAPS Recon), that waste was found on their property and to the Department's Environmental Cleanup Program (Act 2 section) that waste material was found on this lot. Notification can be forwarded to Mr. Anthony Rathfon, Program Manager, Environmental Cleanup Program, Southcentral Regional Office. If this area was not subject of characterization in Phoenix's original site characterization completed as part of their Final Act 2 report, then this area may require further characterization in order to maintain the property's release of liability under the Act 2 program.
5. Delineate the edge of the waste disposal area to identify the landfill location for future reference.
6. The promotion of vegetation is also a requirement of the mentioned closure plan and should be addressed.

Phoenix Group
Attention: Herman Ramig

-3-

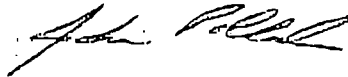
August 18, 2005

In regards to the storage of waste at the Lower Mill (MAEDC) property, the Department understands that approximately 60 drums were previously transported for disposal and subsequently returned to the site. This occurred after they were rejected for disposal by Waste Recovery Solutions. This waste should be characterized, transported and disposed of properly.

The Department rules and regulations defines storage and states that "it shall be presumed that the containment of any waste in excess of one year constitutes disposal." The storage of waste at this location without a permit from the Department may be in violation of the SWMA 35 P.S. Sections 6018.401(a),(b), Sections 302 (a)(b) and Section 6018.610 (9).

If you have any questions or comments, please contact me at 717-299-7601.

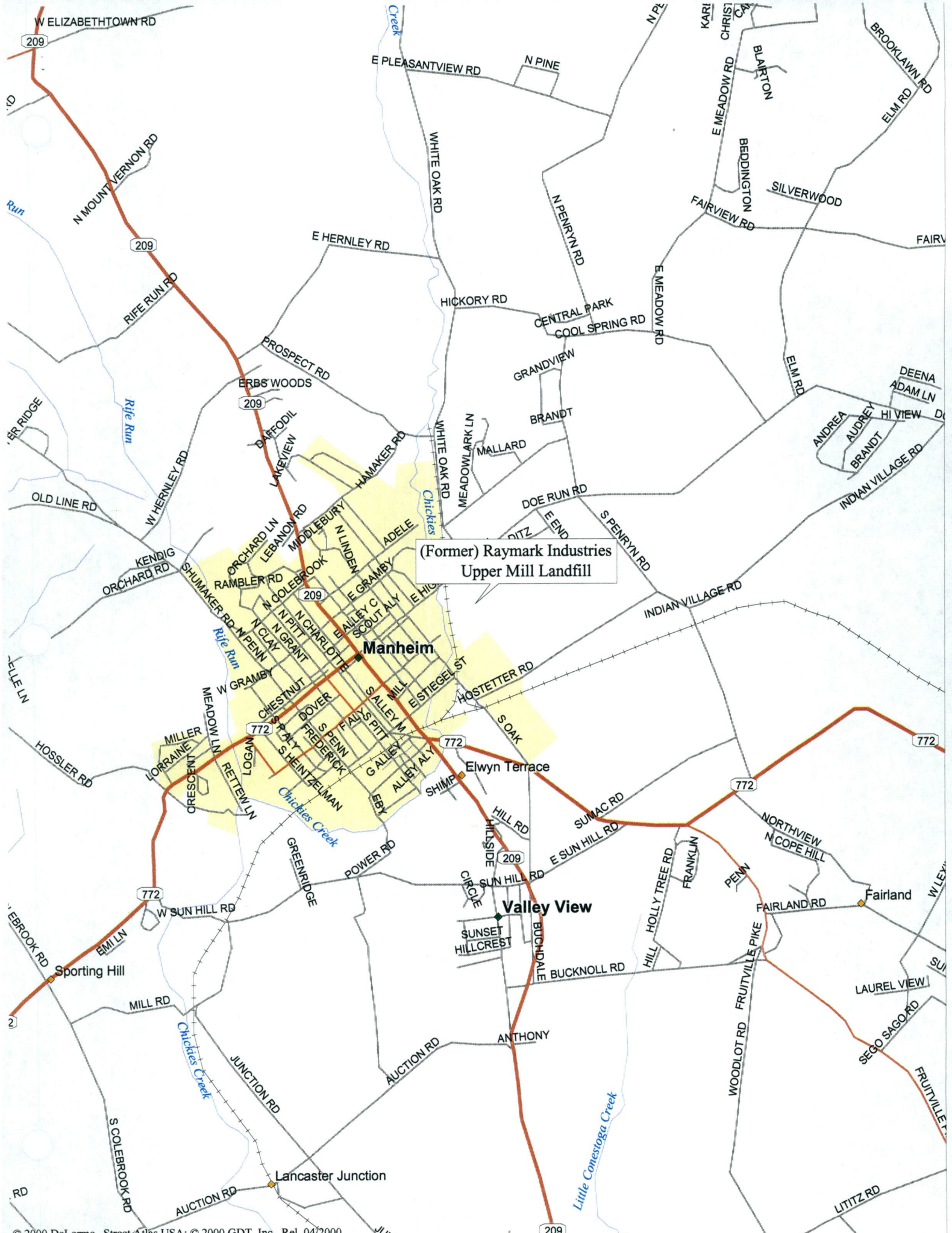
Sincerely,



John Pollock
Solid Waste Specialist
Waste Management Program

cc: Manheim Borough
MAEDC

APPENDIX D
MAPS



(Former) Raymark Industries
Upper Mill Landfill

Manheim

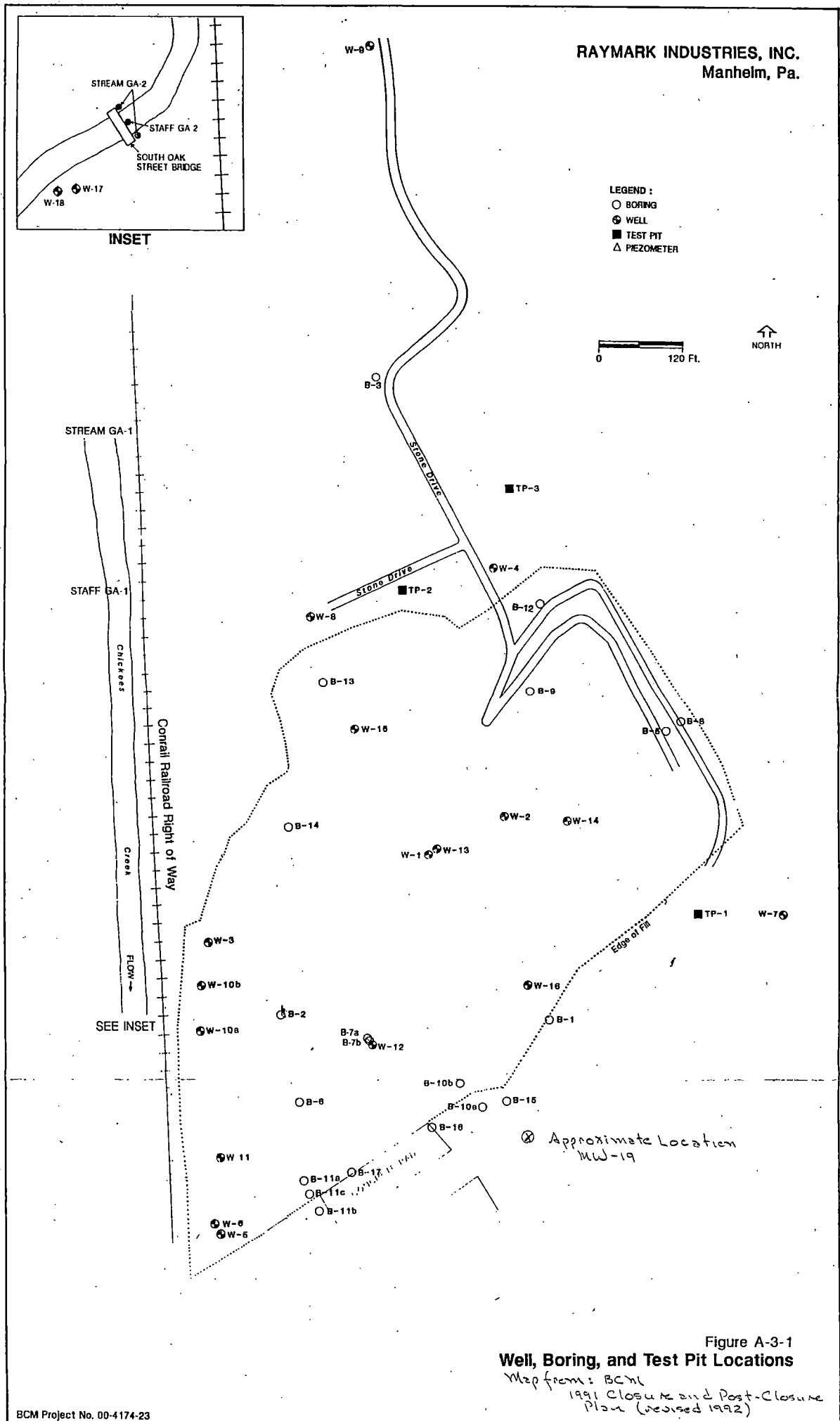
Valley View

Raymark Industries Upper Mill Landfill



Image Data Source: PAMAP Program, PA DCNR, Bureau of Topographic and Geologic Survey

Map created by PASDA (maps.pasda.psu.edu/ImageryViewer)



APPENDIX E
POST CLOSURE CARE PLAN



**RAYMARK INDUSTRIES LANDFILL
POST-CLOSURE CARE PLAN**

PREPARED FOR:

**LOT 5 ASSOCIATES, LLC
123 EAST STIEGEL STREET
MANHEIM, PA 17545**

PREPARED BY:

**RT ENVIRONMENTAL SERVICES, INC.
215 WEST CHURCH ROAD
KING OF PRUSSIA, PA 19406**

RT PROJECT # 2708-67

NOVEMBER 12, 2002

REVISION 7 - MAY 2, 2008

**DEPT OF ENV PROTECTION
Waste Mgmt Program**

MAY 12 2008

RT Environmental Services, Inc.

**909 Elmerton Avenue
Harrisburg, PA 17110-8**

**RAYMARK INDUSTRIES LANDFILL
POST-CLOSURE CARE PLAN**

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4.0	POST-CLOSURE CARE COSTS.....	4
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APPENDIX 2	FINAL UPPER MILL LANDFILL CLOSURE LANDFILL DRAWING
APPENDIX 3	POST CLOSURE COST CALCULATION AND BACKUP ESTIMATES; INCLUDES PADEP CLOSURE PLAN APPROVAL NARRATIVE

**DEPT OF ENV PROTECTION
Waste Mgmt Program**

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MAY 12 2008

**909 Elmerton Avenue
Harrisburg, PA 17110-8**

1.0 INTRODUCTION

This Post Closure Care Plan is for the former Raymark Industries Landfill in Manheim Borough and Penn Township, Pennsylvania. As of October 2005, the landfill was in the post closure care stage; the landfill ceased accepting wastes in 1988. The landfill is capped with an asphalt cover placed over a portion of the site, and a soil cover site cap placed over the balance of the site. Surface water conveyance measures and groundwater monitoring wells are also installed at the site.

A Final Closure Engineering Drawing, including maintenance easements, can be found in Appendix 2.

2.0 INSPECTION

The required inspection features for the Landfill facility are as shown in Table 1. Items which may impede surface water flow are generally to be repaired and inspected as soon as possible to prevent additional erosion. Items involving any erosion of the Landfill soil cap, or of the asphalt cover, are to be repaired in the same calendar quarter that the maintenance item is identified. Additionally, vegetative cover on the soil cap portion of the landfill is to be cut three times per year, as included in the inspection list.

TABLE 1
LANDFILL POST-CLOSURE CARE INSPECTIONS

Area(s)	Inspection Frequency
Stormwater Inlets, Discharge Points	Weekly and After Storms
Groundwater Monitoring Well Integrity	Semi-Annually
Cap Integrity - Asphalt Cracks/Ruts - Soil Erosion/Washout	Quarterly Engineering Inspection
Grass Cutting - Assess Need/Cut As Needed	May, July, September

3.0 GROUNDWATER MONITORING

Groundwater monitoring procedures are summarized in Attachment 1. Groundwater monitoring is to follow required protocols with the Pennsylvania Department of Environmental Protection (DEP), with monitoring results reported on the required forms provided by the Department of Environmental Protection. The monitoring program at the site includes:

TABLE 2
LANDFILL POST-CLOSURE - GROUNDWATER MONITORING SCHEDULE
(Beginning in 2000)

Monitoring Wells	Sampling Frequency and Parameters
W-3, W-4, W-6, W-7, W-9, W-10A, W-10B, and W-19.	Quarterly for 1.5 years - pH (field), chloride, specific conductivity (field) dissolved oxygen (field), Groundwater elevation data, sulfate, alkalinity, total organic carbon (TOC), total organic halogens (TOX), total dissolved solids (TDS) total and dissolved lead. COMPLETED
W-1 and W-13	Semi-Annual for 0.5 years (two sampling events) - Volatile and Semi-Volatile Organic Compounds COMPLETED
W-4, W-6, W-9, W-10A, and W-19 (after written approval from DEP)	Quarterly for 6.5 years pH (field), chloride, specific conductivity (field) dissolved oxygen (field), Groundwater elevation data, sulfate, alkalinity, total dissolved solids (TDS), total and dissolved lead. Total organic carbon (TOC) and total organic halogens (TOX) to be analyzed annually during the 3 rd calendar quarter only 6.25 YEARS COMPLETED
W-4, W-6, W-9, W-10A, and W-19	Semi Annually for 21 years -pH (field), specific conductivity (field) dissolved oxygen (field), Groundwater elevation data, alkalinity, total and dissolved lead. BEGINNING 2nd HALF OF 2008

4.0 POST-CLOSURE CARE COST

The post-closure care costs are as shown in Table 3 below and are current as of April 2008.

Post-closure care activities are expected to be relatively low at this facility for several reasons:

- The waste is not putrescible.
- Fill thickness is modest.
- The waste type is uniform.
- There are no significant releases of concern to groundwater.

The cost estimate for the post closure period includes:

- Groundwater sampling in key monitoring wells.
- Quarterly engineering certification inspections.
- Asphalt and earth cap repair and maintenance, with slope repair reseeding as needed.
- Contingent closure conversion of the asphalt cap portion to a 12" earthen cap.

Based on recent experience, the following post-closure care program is presented:

**TABLE 3
POST-CLOSURE CARE COSTS
MAY 2, 2008**

	<u>Annual Costs</u>
Cover Maintenance - 2008	
Grass Cutting (annual)	\$550
Filling/Reseeding L.S. (annual)	\$475
Pavement Maintenance (annual).....	\$2,000
Quarterly Engineering Inspections (\$125 quarterly).....	\$500
Engineering Inspections report (annual)	<u>\$300</u>
SUBTOTAL FOR 2008	\$3,825
2008 Groundwater Sampling & Analysis	
Reduced Quarterly Sampling - 2 Quarters Remaining in 2008) \$1,080 / event	\$2,160
One Semi-Annual Sampling Event - \$860 / event.....	<u>\$860</u>
SUBTOTAL FOR 2008	<u>\$3,020</u>
TOTAL POST CLOSURE COSTS FOR 2008	\$6,845
2009 – 2030 Maintenance Costs (includes 4% inflation per year and 3.7% interest per year)	
Groundwater Sampling & Analysis	
Semi-Annual Monitoring 22 years – 2009 thorough 2030	
and	
Cover Maintenance	
Grass Cutting, Reseeding, Pavement Maintenance, Engineering Inspections and reports – 22 years – 2009 thorough 2030	
	\$133,079
Adjustment/Allowance – Contingent Closure (See Appendix 3)	<u>\$9,750</u>
TOTAL POST CLOSURE COST (with inflation and interest)	\$149,674
Details of the post closure calculations and cost back-up estimates are provided in Appendix 3.	

5.0 REPORTING

The quarterly or semi-annual Groundwater monitoring results will be submitted following each sampling event. The quarterly engineer's inspection of the landfill will be submitted to PADEP every three months in a Quarterly Engineer's Inspection Report. Also included in the Inspections Report will be records indicating that the previously identified post-closure care maintenance items have been satisfactory completed.

6.0 PADEP REQUIREMENTS

As shown in Appendix 3, PADEP has required the following as part of the post closure care for the former Raymark Industries Upper Mill Landfill:

- A financial assurance amount of \$149,674 in 2008 dollars is acceptable.
- An updated Post Closure Care Plan is required for the Contingent 12" thick earthen cap in the area where asphalt is currently present. This should be submitted to PADEP for approval by March 31, 2009.
- No financial assurance cost disbursements will be permitted by PADEP until the Owner providing financial assurance demonstrates that, with interest accruing, that the total financial assurance exceeds the actual annual Post Closure Care Cost.
- The Post Closure Care Cost Estimate shall be updated annually and submitted to PADEP by March 31st of each year.
- The financial assurance will be placed in and remaining an interest bearing account.

APPENDIX 1
GROUNDWATER MONITORING PROCEDURES

**FORMER RAYMARK INDUSTRIES
LANDFILL CLOSURE
SAMPLING AND ANALYSIS PLAN**

PREPARED BY:

**RT ENVIRONMENTAL SERVICES, INC.
215 WEST CHURCH ROAD
KING OF PRUSSIA, PA 19406**

RT PROJECT #1799-32

DECEMBER 2000

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3.0 REPORTING	2

ATTACHMENT

ATTACHMENT A GROUNDWATER SAMPLING SHEET

1.0 INTRODUCTION

RT Environmental Services, Inc. is pleased to submit this sampling and analysis plan, outlining the groundwater sampling procedures to be implemented at the former Raymark facility, in Manheim, Pennsylvania.

2.0 GROUNDWATER SAMPLING

Prior to the collection of groundwater samples depth to water measurement will be obtained using a decontaminated air/water interface probe. A groundwater sample will be obtained by purging a minimum of three well volumes twenty-four hours prior to sampling a well. Well volumes will be determined based upon total well depth and measured depth to water readings. Wells will be purged using a submersible pump at low flow rate to minimize turbidity and volatilization. Well evacuation procedures will commence by placing dedicated 5/8" inch polyethylene tubing down the well with a previously decontaminated 2" submersible Grundfos pump. Purging and sampling will proceed from the least impacted to most-impacted well based on previous analyses. Decontamination of the sampling pump includes a soap and water wash, followed by a rinse with distilled water. The pump intake will be located in the middle or slightly above the middle of the screened interval and groundwater will be removed at an approximate pumping a rate of 0.5 gal/min. Specific conductivity, dissolved oxygen, temperature and pH will be measured and purging will be considered complete when two consecutive readings are within 10 percent of each other for each parameter. All groundwater purge data will be recorded in the project field book, as well as on a groundwater sampling summary sheet (Attachment 1). Water generated as a result of purging will be treated on site through granulated-activated carbon, and / or will be filtered if needed.

Analytical samples will be obtained via a bailer and placed directly into laboratory cleaned sampling containers. All samples will be analyzed for the parameters indicated in Table 2.

3.0 REPORTING

Once all field work described above is completed, laboratory data is received, RT will prepare a Report detailing all field activities, a summary of the groundwater elevation data and laboratory data. The quarterly/semi-annual report will be completed prior to end of calendar quarter in which the samples were taken and then submitted to PADEP.